Public Laws; 102nd Congress / 2nd Session / Senate
Hearings / 1992 c.2

S. HRG. 102-1058

MEDICARE PAYMENTS FOR GRADUATE MEDICAL EDUCATION

HEARING

BEFORE THE

SUBCOMMITTEE ON
MEDICARE AND LONG-TERM CARE

OF THE

COMMITTEE ON FINANCE
UNITED STATES SENATE

ONE HUNDRED SECOND CONGRESS

SECOND SESSION

JULY 29, 1992

Printed for the use of the Committee on Finance

U.S. GOVERNMENT PRINTING OFFICE
64-939—CC WASHINGTON : 1993

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-040294-8

64-939 - 93 - 1

COMMITTEE ON FINANCE

LLOYD BENTSEN, Texas, *Chairman*

DANIEL PATRICK MOYNIHAN, New York
MAX BAUCUS, Montana
DAVID L. BOREN, Oklahoma
BILL BRADLEY, New Jersey
GEORGE J. MITCHELL, Maine
DAVID PRYOR, Arkansas
DONALD W. RIEGLE, JR., Michigan
JOHN D. ROCKEFELLER IV, West Virginia
TOM DASCHLE, South Dakota
JOHN BREAUX, Louisiana

BOB PACKWOOD, Oregon
BOB DOLE, Kansas
WILLIAM V. ROTH, JR., Delaware
JOHN C. DANFORTH, Missouri
JOHN H. CHAFEE, Rhode Island
DAVE DURENBERGER, Minnesota
STEVE SYMMS, Idaho
CHARLES E. GRASSLEY, Iowa
ORRIN G. HATCH, Utah

VANDA B. MCMURTRY, *Staff Director and Chief Counsel*
EDMUND J. MIHALSKI, *Minority Chief of Staff*

SUBCOMMITTEE ON MEDICARE AND LONG-TERM CARE

JOHN D. ROCKEFELLER IV, West Virginia, *Chairman*

LLOYD BENTSEN, Texas
MAX BAUCUS, Montana
GEORGE J. MITCHELL, Maine
DAVID PRYOR, Arkansas
TOM DASCHLE, South Dakota

DAVE DURENBERGER, Minnesota
BOB PACKWOOD, Oregon
BOB DOLE, Kansas
JOHN H. CHAFEE, Rhode Island
JOHN C. DANFORTH, Missouri
CHARLES E. GRASSLEY, Iowa

CONTENTS

OPENING STATEMENTS

Page

Rockefeller, Hon. John, D., IV, a U.S. Senator from West Virginia, chairman of the subcommittee 1
Durenberger, Hon. Dave, a U.S. Senator from Minnesota 4

COMMITTEE PRESS RELEASE

Rockefeller Announces Hearing on Graduate Medical Education, Senator Says few Students Becoming General Practitioners 1

ADMINISTRATION WITNESS

Toby, William, Jr., Acting Administrator, Health Care Financing Administration, Washington, DC, accompanied by Dr. Robert Harmon, Administrator of HRSA, Public Health Service, Washington, DC 5

PUBLIC WITNESSES

Koop, Hon. C. Everett, M.D., former Surgeon General of the United States, Bethesda, MD 14
Lee, Philip R., M.D., chairman, Physician Payment Review Commission, San Francisco, CA, accompanied by Dr. Laure LeRoy, deputy executive director, Physician Payment Review Commission, San Francisco, CA 25
Schroeder, Steven A., M.D., president, Robert Wood Johnson Foundation, Princeton, NJ 28
Buchanan, J. Robert, M.D., chairman, American Association of Medical Colleges, and general director, Massachusetts General Hospital, Boston, MA 40
Hodapp, Michael J., M.D., on behalf of the American Academy of Pediatrics and the American College of Physicians, Willmar, MN 42
Keller, Gerald C., M.D., vice president, American Academy of Family Practice, Mandeville, LA 44
Weston, W. Donald, M.D., vice chancellor for Health Sciences, University Systems of West Virginia, Charleston, WV 47

ALPHABETICAL LISTING AND APPENDIX MATERIAL SUBMITTED

Buchanan, J. Robert:
Testimony 40
Prepared statement with attachments 55
Durenberger, Hon. Dave:
Opening statement 4
Hodapp, Michael J.:
Testimony 42
Prepared statement 70
Keller, Gerald C.:
Testimony 44
Prepared statement 74
Koop, Hon. C. Everett:
Testimony 14
Prepared statement 80
Lee, Philip R.:
Testimony 25
Prepared statement 82

Page

Rockefeller, Hon. John, D.:
Opening statement 1
Schroeder, Steven A.:
Testimony 28
Prepared statement 86
Toby, William, Jr.:
Testimony 5
Prepared statement 90
Weston, W. Donald:
Testimony 47
Prepared statement 93

COMMUNICATIONS

American College of Preventive Medicine 98
American College of Rheumatology 101
American Medical Association 103
American Medical Directors Association 105
American Medical Student Association 106
American Osteopathic Hospital Association 107
American Society of Internal Medicine 109
Society of Teachers of Family Medicine 116

MEDICARE PAYMENTS FOR GRADUATE MEDICAL EDUCATION

WEDNESDAY, JULY 29, 1992

U.S. SENATE,
SUBCOMMITTEE ON MEDICARE AND LONG-TERM CARE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 2:05 a.m., in room SD–215, Dirksen Senate Office Building, Hon. John D. Rockefeller (chairman of the subcommittee) presiding.

Also present: Senators Baucus, Rockefeller, Daschle, and Durenberger.

[The press release announcing the hearing follows:]

[Press Release No. H–40, July 22, 1992]

ROCKEFELLER ANNOUNCES HEARING ON GRADUATE MEDICAL EDUCATION, SENATOR SAYS FEW STUDENTS BECOMING GENERAL PRACTITIONERS

WASHINGTON, DC.—Senator John D. Rockefeller IV, Chairman of the Senate Finance Subcommittee on Medicare and Long Term Care, Wednesday announced a hearing to consider how Medicare payment policies affect physicians' choice of medical specialties.

The hearing will be at *2 p.m., Wednesday, July 29, 1992* in Room SD–215 of the Dirksen Senate Office Building.

"We need to examine Medicare's role in establishing the ratio of generalists to specialists in the U.S.," Senator Rockefeller said. "There is a trend for fewer medical students to elect primary care specialties, contributing to shortages in some areas of the country."

"It is important to determine how great this problem may be, and to look at options for modifying Medicare policies, including graduate medical education payments and the physician payment schedule to encourage physicians to opt for a career in primary care," Rockefeller said.

OPENING STATEMENT OF HON. JOHN D. ROCKEFELLER IV, A U.S. SENATOR FROM WEST VIRGINIA, CHAIRMAN OF THE SUBCOMMITTEE

Senator ROCKEFELLER. This hearing has now begun. And I want to apologize even in advance. The energy bill is on the floor. There are a variety of controversial amendments. In fact, there is some attempt being made to add small group market insurance reform on the Energy bill, which is kind of an interesting approach, and there will be a number of votes.

I want to apologize for that, because my whole purpose of this hearing—and some of my colleagues are on the floor right now and they will be here—is to really deeply explore this subject, and with some sort of luxury of time, thought, and depth.

It just so happens that on this particular day, an enormous amendment that I have been working on for 3 years is coming up. I do not know whether it will be 2:30 or 10:30, but when it comes up I will have to go down.

I just want to apologize in advance for that. It is the usual question of, where the Senate is, and why are they not doing their work, which is ordinarily a good question. But today, there are reasons for that.

Let me just make a statement before we go to our first very distinguished witness. Reforming America's failing health care system is not just an obsession of mine, but it is a driving goal now for Congress. And I think it is a defining issue in this campaign, or will be for the Presidency.

The fundamental reforms that are needed to save our system are always complicated, always expensive, and always politically contentious. Today's hearing is going to focus on a critical and often overlooked piece of this health care puzzle, and that is making sure that America has enough doctors, encouraging them to practice in the communities where they are needed, and ensuring that they have the general training that they need to provide primary care in a straightforward, inexpensive, and effective way, and to control costs in this country.

There is no excuse that I can think of for continued inaction in an area of this magnitude. In the last 25 years, the number of doctors practicing in America has doubled. That is impressive.

But, on the other hand, in my State of West Virginia's 55 counties, all, or a part of 43 of those counties are federally designated as Health Manpower Shortage Areas. There just are not doctors there. It is a common story in rural America, and in poor, urban areas.

Having more doctors has not resulted in even distribution of health services. Only 35 percent of American physicians are generalists, compared with more than half of all of the countries like England, Canada, and Germany, where I think it may even be up closer to 70 percent.

These countries are spending far less on health care than we do, yet more of their children survive infancy, and their citizens live longer than Americans do. Some have suggested is that the reason is that their emphasis is on primary care, inexpensively provided to every citizen by general practitioners.

The specialists who have come to dominate the American system spend more time, order more diagnostic tests, prescribe more medications, and schedule more return visits than generalists treating those same patients. The additional expense does not necessarily reflect more effective practices, though, and we need to make a change.

Why do we have so few primary care doctors, and why are fewer medical students choosing a generalist career each year, thus compounding our problem? To really understand how a young physician decides on the choice of an area of practice, we need to see their career choices as, indeed, they themselves do.

I would like to read, therefore, a few lines from the New England Journal of Medicine, written by Dr. Clifton Cleveland, who is a

general internist from Signal Mountain, TN. I have never met him, but he is now my friend.

He says: "Medical students and residents are not ignorant. They can see the distressed and harried lives of internists, and the obvious glamour and high incomes of medical and surgical specialists. The role models available for students and residents send widely divergent signals," he continues.

"In my community, the incomes of specialists are up to 20 times those of primary care physicians. Increasingly, internists spend their time caring for the aged, the hopelessly ill, and those who have fallen through our Nation's tattered social safety net," he continues.

"Young internists have trouble financing a home. They cannot set aside money for their children's education," he continues. "The careful practice of internal medicine and other primary care disciplines often involves enormous patience, a willingness to listen and listen intently, and the ability to respond to a wide array of chronic and acute illnesses over an extended period. Students and house staff rarely have the chance to participate meaningfully in this process."

He continues, and this will end his statement. "Instead, they are immediately charmed by the flash and the dash of high-tech interventions, the excitement, the quick answers, the big pay-offs." He says, "I like what I do, but I feel increasingly beleaguered and under-valued by patients and sub-specialists, alike. Is it any wonder then that debt-burdened medical students avoid careers in Internal Medicine, Pediatrics, and Family Practice?"

This hearing, therefore, is devoted to Dr. Cleveland's problem. To finding ways to help more doctors choices follow Dr. Cleveland into general practice, to keep them practicing medicine at its most fundamental and rewarding level.

I am determined to find a solution that will assure that all Americans, whether they live in suburban Philadelphia, in downtown Minneapolis, or in rural West Virginia, receive adequate and affordable health care.

Frankly, I sense a growing interest in all of this within this committee, among the health care community, in general, to really ratchet up the pressure on this issue. It is the hidden issue, and it is probably the great issue.

As we will hear, the Medicare program, through its support for medical education, influences the choices that medical students make. Government has a hand in making these choices for young medical students.

After this hearing, I hope that we are going to begin exploring ways, through Medicare and other means, to deal with the problems that we will discuss today. Anyway, I think you see the dimensions of the hearing.

I want to thank everybody who is here. This is an absolutely splendid witness list. Senator Durenberger and I are very proud of it. And I would ask Senator Durenberger if he has some comments.

OPENING STATEMENT OF HON. DAVE DURENBERGER, A U.S. SENATOR FROM MINNESOTA

Senator DURENBERGER. Yes, Mr. Chairman. First, to thank you for the opportunity to get back to this subject. I do not think we have been at it for about 10 years, or something like that. So, I am grateful to you for this opportunity then to welcome everyone here, especially Mike Hodapp, who is a pediatrician from Willmar, MN, and who used to practice for 5 years in my home town of St. Cloud. I am glad he is here today to talk about primary care and what some will call the generalists.

The problems of physician supply and the concern about over-specialization, and even the problem of the deprecation of the generalists in medicine by their peers who have found specialization their preference, are not new problems.

I have served in the Senate since 1978, and the issue has been around at least that length of time. We have made some efforts to deal with it. My most famous effort when I chaired the subcommittee was to suggest that we take all of the graduate medical education money, put it in block grants, and send it back to the States. You can imagine the furor that created from private medical schools and a variety of teaching hospitals out there who thought that these State universities would be the only places ending up with money.

So, two brilliant physicians came up with some of the ideas that are now incorporated into the way in which Medicare provides for the partial financing of medical education.

We have dealt with the problem most recently, as you know, Mr. Chairman, in RBRVS, and the implementation of the new Physician Fee Schedule as an important part of trying to come to grips with the problem. We have known for a long time that the lack of adequate primary care doctors in this country creates a serious access problem for many people, and it is going to create a more serious problem.

My own medical school at the University of Minnesota, and its relatives at the University of Minnesota, Duluth Branch, produce more family practitioners, I think, than any other institution in America. But, I have just watched, in the last couple of years, the drop-off in the number of people even in those institutions that are going into primary care.

The over-supply of specialists has now been linked to the rising costs of health care, and because cost control is now at the top of the health care reform debate, this link has attracted attention to the issue of supply once again.

Too many specialists means too much technology, too many services. And, unfortunately, the medical marketplace has so many dysfunctions in it already, and they absorb all of these specialists, despite their over-abundance. We cannot rely on the existing marketplace to send the right signals to calibrate supply and demand.

We need three simple ingredients to solve this problem: vision, leadership, and some action. We need a vision of where we want to go in health care. It has to be a shared national vision.

And then we need leadership. We need it in the government, we need it in the medical profession, and we need it in our communities. We have a visionary leader in a person like Dr. Koop, but

the profession, both in the medical schools and in the specialty organizations, needs to take a long, hard look at itself and its role in helping us resolve this issue.

The vision requires us to understand how to get real value for our health care dollar. We do not need to reduce fees or set global caps. What we need to do is encourage productivity. Productivity simply means getting more value from the health care dollar, getting more health care for less money.

We can only accomplish this if we change the way medicine is practiced in this country, and that means the way we organize systems of care, the way we train physicians to work within those systems. We need leaders like Dr. Koop. We need thinkers like Dr. Lee and many others who are here today, if not in person, in spirit; people who know the medical system from the ground up in order to help us move in that direction.

With vision and with leadership, the third ingredient, action, will follow. Action is called for now. This is not a new problem. It is a complicated problem. But it is no more complicated than many of the issues that we face in this committee every day.

So, I hope that the experts testifying today will help point us in the appropriate direction and commit themselves to helping the Nation solve this problem.

Senator ROCKEFELLER. Thank you, Senator Durenberger. Senator Durenberger and I are a good team, and we are proud to work with each other. Thank you very much. Mr. Toby, I apologize for keeping you waiting, sir. You are the Acting Administrator for the Health Care Financing Administration, and we welcome your comments on this important subject.

STATEMENT OF WILLIAM TOBY, JR., ACTING ADMINISTRATOR, HEALTH CARE FINANCING ADMINISTRATION, WASHINGTON, DC, ACCOMPANIED BY DR. ROBERT HARMON, ADMINISTRATOR OF HRSA, PUBLIC HEALTH SERVICE, WASHINGTON, DC

Mr. TOBY. Thank you, Mr. Chairman, members of the subcommittee. I am here to discuss efforts by the Department to improve access to primary care and increase the Nation's supply of primary care physicians.

I am accompanied by Dr. Robert Harmon, who is the Administrator of HRSA in the Public Health Service. He is here to assist me in answering questions you may have about the Public Health Service's programs that support primary care.

Secretary Sullivan has been an outspoken supporter of primary care providers and an advocate for primary care and preventive services, as you well know. Both HCFA and the Public Health Service are pursuing a range of initiatives to promote primary care medicine.

And, although HCFA and PHS play a significant role in supporting medical education, there are others that are important to these discussions: third-party payors, private research foundations, charitable organizations, and State and local governments also contribute to physician training in this country.

As you know, Mr. Chairman, HCFA programs focus on financing of health care. Within that context, HCFA is attempting to create

better incentives to emphasize the importance of primary care medicine in our Nation's health care system.

For example, under the Medicare Physician Fee Schedule, primary care physicians will receive larger total increases in Medicare payments compared to surgical and other procedural specialists.

Medicare also provides bonus payments to physicians who practice in designated Health Professional Shortage Areas. The ten percent bonus is intended to encourage providers to remain in underserved areas. In 1992, HCFA will spend about $50 million on bonus payments.

Medicaid is also an important vehicle for promoting primary care. Medicaid's primary care case management programs have shown cost savings, while improving access, as well. Under these programs, each Medicaid recipient has a primary care physician responsible for providing or authorizing all non-emergency services.

Both the recipient and the Medicaid program benefit from coordination of care. The program is an excellent example on how reliance on primary care physicians can yield a win-win situation.

The Public Health Service is responsible for several programs designed to encourage the training of primary care physicians: the National Health Service Corps, the Community-Based Scholarship Program, and the Minority Disadvantaged Health Professions Program support the training of health professionals and enhance the provision of health care in rural and inner city under-served areas.

Despite these efforts, the promotion of primary care physicians is decreasing, and the number of students entering primary care residencies has declined. Although the overall number of active physicians has grown significantly in recent years, we have seen a declining proportion of primary care physicians over the last 25 years, from 42 percent to about 34 percent of the total physician work force.

An adequate supply of primary care physicians is critical to both health care reform, and the future of our health care system. Health care reform can only be effective if providers who deliver high-quality cost-effective care are available. I would note that the President's Comprehensive Health Care Reform Program would provide incentives for the provision of primary care services through coordinated care systems.

Primary care can be an effective cost containment strategy. Research indicates that primary care physicians hospitalize less and prescribe fewer drugs than specialists, even when caring for similar patients.

Unfortunately, disparities in income and prestige, and the trend of medical schools towards specialty training discourage students from pursuing primary care training. This disheartening situation has led the Secretary to request that HCFA and PHS investigate options for achieving a realistic and sound mix of primary care physicians and specialists in this country.

One option we are discussing would make graduate medical education payments directly to non-hospital ambulatory facilities. We believe that these facilities are appropriate settings for training primary care physicians.

As you know, Mr. Chairman, primary physicians are the foundation of a sensible and workable health care system. We believe that

properly designed incentives in the system will improve the proportion of primary care physicians to specialists. Thank you. I would be happy to answer any questions you may have.

[The prepared statement of Mr. Toby appears in the appendix.]

Senator ROCKEFELLER. Thank you very much, Mr. Toby. I failed to call on Senator Daschle, because I did not see him come in. Is there any statement that you wish to make, Senator Daschle?

Senator DASCHLE. I do not have a statement, but I will have some questions.

Senator ROCKEFELLER. All right. Very good. Mr. Toby, I come from a State in which we have a lot of physicians, but obviously not enough. We have a lot of physicians that come from overseas. They are graduates of international medical schools. There have been a lot of folks calling for limiting the number of international medical graduates that we train here.

One, do you agree with that suggestion? Would not primary care specialties suffer the most, since a large number of international graduates choose a generalist career?

It is just very fascinating to me that my own State, in some of the most difficult rural areas, you are likely to find physicians of foreign nationalities who are the ones that are doing the generalist work, and others decline to go there. I am interested in your comments.

Mr. TOBY. Mr. Chairman, I also went to college in West Virginia, as you probably know. I come from New York City, where we have a lot of international foreign students practicing medicine. In fact, I am not sure how we could carry out our mission to provide health care services to the poor and many individuals in rural areas if we did not utilize the services of foreign nationals.

As you also probably know, Medicare does not distinguish between physicians by where they went to school geographically, or the institution in which they graduated from, or the country they come from. So, we do not make decisions based on those factors. Consequently, we are primarily a financier of health services and we make no judgment about health manpower policy. We leave that to State and local officials.

Senator ROCKEFELLER. It is interesting. In Canada, there are, I would guess, three major reasons that there are more generalist physicians than there are here. One, it is considered in Canada a more prestigious career, for whatever reason; the government pays for, and, therefore, controls most residency positions, which is critical and crucial; and there are greater economic incentives for primary care so they get better results.

Interestingly, the Royal College of Physicians and Surgeons in Canada has defined that specialists should act only as consultants, and that primary care is the domain of generalists. So, they do things differently.

Now, at a recent national Primary Care Conference sponsored by yourself, HCFA, and the Public Health Service, it was suggested that since there are a lot of unfilled primary care residency slots—in some places, in fact, up to 30 percent—that weighting direct GME payments toward primary care residencies is merely symbolic and it will not materially influence a medical student's choice of what kind of residency. Are we merely scratching the surface by

changing Medicare Part A waiting toward generalists, do you think?

Mr. TOBY. I think that the problem is a very, very multi-faceted one in which we do not have a lot of data as to why students choose to go into one specialty or another. I do think a lot of this is common sense. I do think there are very important economic considerations in terms of choice. I think that one choice has to do with the prestige that a lot of the medical students feel.

I do think that, while it is multi-faceted and very complex, one of the ways that we can make a change here is through the leverage of the Medicare program. Since we represent 30 percent of graduate education finances we can make a difference in terms of how we make payments and use the incentive—or at least the leverage—of Medicare in how we pay for medical education. This would send a message to the schools that it is important to us that they have programs that promote primary care residency.

Senator ROCKEFELLER. And that is fine. We are talking about sending a message. Now, the National Primary Care Conference said that Medicare's impact is obviously huge. It is a huge impact, and it determines what choices people make, and all kinds of things.

In essence, what we all know here perfectly well is that we have a shortage of primary care doctors, that it is getting worse, and that it probably will continue to get worse. And, therefore, the concept of maybe HCFA and the Public Health Service getting together and doing something called figuring out an overall manpower policy for direct intervention.

As Acting Administrator, you recognize that we have got this problem, and it is getting worse. What are we going to do about it? How do we intervene, and why not develop an overall policy to determine manpower?

Mr. TOBY. It is true that Medicare has a great deal of influence in the health care system. It is a pace-setter in many ways. And I think Medicare should use leadership here, as well. We want to exercise leadership.

We think that what we could do with regard to the graduate medical education policy would allow us to participate in terms of new directions in a way in which we can allow Medicare to continue to be a pace-setter and a leader.

We do not believe, however, that government controls will be the answer here. We think that government controls rarely work as intended. We think that incentives are much better.

Senator ROCKEFELLER. What about a policy?

Mr. TOBY. I am sorry?

Senator ROCKEFELLER. What about a policy? Not controls, but a manpower policy.

Mr. TOBY. Well, we have a policy. We believe that HCFA and PHS programs can be better focused. However, we think that specific manpower policy should be set at the State and local level. I come from New York, and I can tell you that New York State is exercising tremendous leadership with regard to primary care. In 1992, they are taking major steps to do it. We think this sort of leadership should come from the State and local level.

We think, at the Federal level, we should set very broad goals, we should use the leverage of Medicare as a payment mechanism to provide incentives to encourage medical schools to train primary care physicians, to increase the number of residency training programs with teaching hospitals. And we think that, because of our leverage, hospitals will listen to that.

Senator ROCKEFELLER. Well, I could debate that, and probably will. Senator Durenberger.

Senator DURENBERGER. Thank you, Mr. Chairman. Mr. Toby, do you agree with the general consensus that there is a very substantial growth in residency training programs in this country, that there is an extra special growth in sub-specialty residency, that there is a over-supply or potential over-supply of sub-specialists in this country and sort of a dangerous beginning of a decline in general and primary care practitioners?

Mr. TOBY. Yes, sir, we do believe that. And that is one of the reasons why we have tried to rise and take some leadership by restructuring our GME payments turn that data around which shows that we have a crisis. We want to influence, through additional financial support, at least, as well as trying to coordinate our policy with the Public Health Service, and improve the dismal picture you just described.

Senator DURENBERGER. You said earlier, and maybe you misspoke. You said, part of the new direction, or something you are considering is financing residencies is ambulatory settings.

Mr. TOBY. I am glad you mentioned that to me, sir. We want to actually make graduate medical education payments directly to non-hospital ambulatory facilities. I misspoke.

Senator DURENBERGER. You said non-ambulatory. What you meant to say is you are considering funding residencies in ambulatory settings.

Mr. TOBY. In ambulatory settings. Exactly.

Senator DURENBERGER. Or out-patient settings.

Mr. TOBY. Right. Exactly.

Senator DURENBERGER. All right. How long are you going to consider that? [Laughter.]

Do we have a recommendation from you to do that? I am sorry. I did not mean to be facetious about that. But is there a specific proposal before us?

Mr. TOBY. Well, these are policy approaches that we are discussing internally, and they are on a very fast track within the Department. Dr. Sullivan is very supportive. We see this coming to a resolution in the near term.

Senator DURENBERGER. I just need to kind of sort out and make sure we are on the same track when you say government controls do not work. It is pretty clear that government payments do work, in one way or another, to give you whatever government is going to pay for.

The Federal Government, as we know, is the largest, single explicit financing sort for graduate medical education. I sort of get the impression that if we, the Federal Government, were not financing it through Medicare, through VA, through Department of Defense, we would not see a lot of medical education, or that is what a lot of people tell me.

So, the point there is simply that if we deal with the way in which we in the Federal Government are paying for medical education, if we begin to thoughtfully try to change that, we may well have an impact on the appropriate supply of the appropriately trained physicians that we need. Is that not correct?

Mr. TOBY. That is correct. We take very seriously that Medicare payments to graduate education represents 30 percent of their income, so obviously we have influence. But there are other payors, as well. And we think that if this problem is to be resolved, it is going to take other people who represent a part of this large puzzle to also carry their responsibility as well.

We think, however, that we are doing a great deal in terms of support for primary care. Because, as you know and as a great person who was involved in the Medicare fee schedule, we see the physician fee schedule as terribly important to make primary care more attractive financially, as well as to help attract more medical students into primary care careers.

The Medicare fee schedule sends a very clear signal that Medicare believes that there should have been some redistribution in terms of the revenue to increase, or at least make primary care more attractive.

Senator DURENBERGER. I think we are going to have to escape and vote here in just a minute. Can you see whether the five light is on up there, John?

Senator DASCHLE. The lights just came on. Senator Rockefeller is going to try to get back and then I will go over when he comes back.

Senator DURENBERGER. All right. Thank you. The problem, I think, as we well know it, particularly sitting here, is that a lot of the other payment systems in the country, one way or another, are following Medicare. What Medicare does with the DRGs, and, now, RBRVS, affect these other systems.

The problem here—and maybe you can help me acknowledge it, since I may well be part of the problem—is that 80 percent of the residents in this country are trained in 329 Council on Teaching Hospital institutions. And any time anybody suggests that we ought to change the teaching subsidy or the medical education subsidy, at least 328 of those 329 in one way or another, and maybe all 329, are in here trying to influence that process in some way.

There seems to be a concentration of a lot of the subsidies in relatively few large, tertiary center hospitals who are able to hire $24,000-a-year—some people call it slave labor—in order to provide these important tertiary care services.

And the problem for you and me seems to be—and I need you to help me understand this—breaking that link in some way because they need the services, they want the subsidies, and it is through them that the distortions seem to come in the system. Is that right, or not?

Mr. TOBY. Well, they want the subsidy. And I think the question is, how do we change the direction? And it is going to require a variety of approaches and I think that our insistence on change in the way in which we pay for education is going to cause a lot of restructuring within the system.

And I think that it should be very well understood, Senator, that while Medicare has a great deal of influence in terms of financing and changing the service delivery system, Medicare, at the same time, cannot fix every manpower problem there is in the system in terms of distribution professionals.

Senator DURENBERGER. I yield to my colleague from South Dakota.

Senator DASCHLE. Well, as Senator Durenberger has indicated, we are going to have to vote. I am going to see if we can wait for a couple of more minutes until Senator Rockefeller returns. If not, we may have to put the committee in recess for a couple of minutes.

But let me just follow on with the line of questioning that Senator Durenberger was asking, because I think it really hits exactly into one of the areas that we ought to explore more effectively.

You said earlier, Mr. Toby, that it was your view that there ought to be more decision-making authority at the State level and the local level in determining manpower issues. And I am troubled by that answer, in part, because of your answers to Senator Durenberger with regard to Medicare.

The fact is, Medicare really does a substantial degree of power, of responsibility in determining what criteria are established in manpower. And I guess what I would like to have you elaborate upon is to what degree are States given flexibility under Medicare? They do not have the kind of flexibility that you have alluded to, I think. Do they?

Mr. TOBY. States have enormous flexibility in the Medicaid program, and that is the only reason that we have a Medicaid program in the first place. Because, at the beginning of 1965, a deal was cut that the Federal Government would provide very broad policies, and the States, for the most part, would manage the Medicaid program. States have the responsibility, or at least they have the freedom, to use their reimbursement methodologies, particularly for hospitals, in terms of manpower.

Senator DASCHLE. Let me just say, Medicare does not pay medical education in its entirety to the States, in terms of that responsibility committed to Medicare.

Mr. TOBY. We fund institutions directly.

Senator DASCHLE. Exactly.

Mr. TOBY. Through Medicare.

Senator DASCHLE. That is what I am saying.

Mr. TOBY. I'm sorry, I thought you said Medicaid.

Senator DASCHLE. So, how is it that they have flexibility within the confines of current reimbursement practices?

Mr. TOBY. I do not think I understand your question. You mentioned Medicaid before.

Senator DASCHLE. No. Medicare.

Mr. TOBY. What I am saying is that what we are doing is we are exploring a series of options. One, is how we pay graduate medical education to institutions themselves. We have a series of options to address ambulatory care, as well. And each option is very, very serious but they are also very complex.

Senator DASCHLE. Well, I am not sure that that answers my question.

Mr. TOBY. All the options have the end, of course, of changing what occurs now.

Senator DASCHLE. Basically, my point is—and I think that Senator Durenberger was making a similar point—that, given Medicare's ability to influence decisions at all levels, especially with regard to medical education, the States are very limited in their ability to counter the weight, the authority, the responsibility that they have under the laws currently provided, to use whatever flexibility you would like them to use to adapt more appropriately to whatever setting they have at the local level. They cannot do that. They do not have that ability.

Mr. TOBY. Well, this is a very complex problem, as you just said. New York State is using its responsibility of helping primary care by providing loan guarantees to students, for example. New York is also looking at the way in which they reimburse institutions for indirect medical education under the Medicaid program. They recognize that they are part of the puzzle, as well.

In other words, what I am saying is that we recognize that we have a responsibility to provide leadership. We have a responsibility to make certain that there is a an adequate supply of primary care physicians because we have over 34 million Medicare beneficiaries who are going to need services, and there should be availability.

We are exploring a series of options with regard to restructuring our payments to graduate institutions, teaching medical schools, as well as to teaching hospitals. And we think that restructured GME payments combined with the ambulatory options that we are exploring will have the desired end that you and I both want to see—that is more availability of more primary care physicians.

Senator DASCHLE. Well, I am troubled by that answer. In part, because I think if you really are relying on incentives for schools, you may be entirely missing what I think Senator Rockefeller was pointing out in his question to you, the real problem here.

And the real problem was one that you said—and I think I have a quote here, because I wrote it down—"We do not have a lot of data on." And he was referring, there, of course, to the incentives that exist in Canada. Incentives, in terms of both financial, and otherwise. Prestige. The kinds of things built into the Canadian system, for example, that we do not have. I am really surprised that we would not have more data if that is the reason we have not done more.

Mr. TOBY. I was saying earlier Senator, that we do not have a lot of data in the relationship of how economics play a role in the future choices that physicians make. That is what I was talking about.

Senator DASCHLE. So, we have data with regard to the incentives that exist in other countries, and the degree to which those incentives have worked to ensure greater numbers of primary care physicians?

Mr. TOBY. I have not looked at the data. What I was talking about is the fact that the studies I have looked at show no systematic relationship between how a medical student chooses a particular specialty. I have not looked at international data.

We have basically looked at the American health care system. We have looked at the problems in the system. We have looked at the possible ways in which to change the mix of primary care physician specialties, and we have decided that the best way to do it is through positive incentives, not government control. We do not think that government control is going to do it. We could come up with a policy at the Federal level to basically try to control and make sure the availability of primary care physicians exist, but our experience tells us it does not work.

Senator DASCHLE. Well, I certainly am not advocating control. I am advocating greater incentives at the Federal level, and perhaps greater control of the incentives that already exist. But I thank you, Mr. Toby. I am going to run over and vote. I see the Chairman has returned. Thank you, Mr. Chairman.

Senator ROCKEFELLER. Thank you, Senator Daschle. Just a final question on the RBRVS fee schedule, itself. What Senator Durenberger and I had contemplated when we produced this legislation is that there would be really very significant increases in reimbursement for primary care physicians.

And it turned out, after it went through HCFA and some other places, that it was much less. In fact, many physicians were led to believe that it was a very substantial increase, and it was not a very substantial increase, and many physicians are, in fact, kind of double let down because of that.

Do you think that one of the ways we have got to do this is to be more aggressive with respect to the Resource-Based Relative Value Scale, and that we should give more recognition to evaluation and management services?

Mr. TOBY. Well, I think that the fee schedule is the right way to go, Senator. And I think that if we can get past this transition period in which a lot of people believe that the expectations and the results have fallen short, we are going to find that in 1996, what you had hoped would happen. The redistribution of funds will leave primary care services about 30 percent higher relative to the old payment system.

My sense is that it is working. I think that we have a number of choices. One, we could speed up the transition. But we do not want to do that, I do not think. This was a very finely crafted compromise, and some physicians would lose money faster. So, my sense is that we should stick with the schedule as contemplated and just see it through. I think it is going to do part of the job, but it will not do the total job.

Senator ROCKEFELLER. Mr. Toby, I thank you for your testimony, for answering questions. I take it that you recognize that we have, I think, a really severe National problem. I really am staggered by the fact that this is so rarely talked about. That there has not been a hearing on this for several years from the U.S. Congress is just ridiculous. And I will continue to look forward to working with you. I know we will have our disagreements, but I know your background and I know your sincerity and the intensity of your commitment to this whole field. I thank you very much.

Mr. TOBY. Thank you, Senator.

Senator ROCKEFELLER. Our next witness is Hon. C. Everett Koop, who is the Former Surgeon General of the United States.

There is a lot I can say about Dr. Koop, and I will not because it would take a lot of time.

But one thing I do know about Dr. Koop is that he is not only a remarkable physician, but a great professional and an extraordinary creator of new thinking in this country, and absolutely unafraid to take on anybody and anything in the pursuit of a health care system that works.

I look forward, Dr. Koop, to joining you on that Dartmouth board that looks at this whole question of getting 50 percent of primary care physicians by the year 2000, if that is possible, but I have not gotten my letter yet. So, I hope that you will——

Dr. KOOP. The board has not met yet, sir.

Senator ROCKEFELLER. All right. Well, when it does, I hope you will give me a good word, because I want to work with you on this problem. I think it is paramount.

Dr. KOOP. Of course, Senator.

Senator ROCKEFELLER. I look forward to your testimony.

STATEMENT OF HON. C. EVERETT KOOP, M.D., FORMER SURGEON GENERAL OF THE UNITED STATES, BETHESDA, MD

Dr. KOOP. Mr. Chairman, since leaving my post as Surgeon General, I have been criss-crossing this country, sharing with audiences large and small, my concern about the faltering health care system. And I have concluded that there is little that I, or I and a few colleagues can really do to bring about health care reform.

But there is something that I and a few colleagues can do, and that is prepare medical graduates of the 21st century in such a way that their patients are more satisfied and trusting of physicians, and doctors are more satisfied with the profession and with themselves.

Accordingly, I have joined the physicians at Dartmouth, as just mentioned. And, there, the curriculum changes we plan by conceptual changes in the practice of medicine, and through a new focus on pre-medical and medical students, we will try to accomplish this end. Much of what I will say today reflects the thinking of my Dartmouth colleagues.

The satisfaction expressed by the recipients of health care in Canada, the U.K., New Zealand, and Australia, I believe, is related not to a superior system of health care, but to the number of practicing primary care physicians. These countries, as you mentioned, have 50 percent; the U.K. has 70; we have 20. And this shortage is not good for the profession, and it is not good for patients. And the reason is simply the lack of applicants for primary care spots.

We ought to know what primary care is. Primary care is medical care that is readily accessible, that is, in an office, a clinic, or by phone, with the knowledge that, if necessary, the patient will be seen, and promptly so.

Second, it is a relationship with the same physician over a long period of time, so that the patient benefits from compassionate counsel, a trusting relationship that leads to healing.

Third, primary care is certainly comprehensive. It is care for acute and chronic illness, rational use of technology, inclusion of complaints which are physical, psychological, and, at times, socioeconomic, the probing of community resources that can be brought

to bear on a patient's problem, and, of course, the ethic of prevention is woven into the entire relationship.

And, fourth, primary care is very personalized care. That means that, in addition to all the above, the primary care physician knows and understands the values of the patient and the family and his care is adjusted accordingly. Referral to other more specialized physicians is appropriate, but the personal continuum is not sacrificed.

You recognize that primary care and its philosophy is probably what attracted most physicians to the medical profession in days gone by. It still does, but for a diminishing minority of those entering medical school. We have to ask ourselves why this is so, and why have the number of applicants decreased. The reasons are many, and it is probably a combination of them that brings us to our present predicament.

Reduced to the most crass terms, the major factors are these: (1) Low pay, especially if compared to procedure-oriented specialists; (2) Diminishing prestige in the eyes of the public, but devastatingly so in the eyes of the rest of the profession; (3) Triage-proficient gatekeeper image associated with the primary care physician; and (4) Training programs in primary care do not satisfy the learner, nor bring him in contact with the role models he seeks. Obviously, more money would make lack of respect easier to bear, and vice versa, but there are other issues.

The quality of life issue exists, such as more time with the family, pressures of long hours at work, the burgeoning elderly population, government interference in the practice of medicine, the diminution of funds for care, all are increasingly important, as are the economic woes. And do not forget how much we demand that the primary care physician must know these days.

Medical students also begin to see themselves early on as either specialists or generalists, and it is hard to change their minds. That is the first time I have used the word generalist, sir, and I would like to say that that is the key to my concluding remarks.

The differences between what I have been calling primary care and the generalist physician really lie in how those four aspects of primary care I mentioned are emphasized in both the theory and the practice of medicine.

We have to get away from acute illness-focused medical encounters. The generalist should concentrate on whole-person medicine, where clinical sciences have made their greatest advances in recent years. We need more generalists to treat the illness of patients, rather than the diseases which afflict them. We need generalists who will cater to what patients want, according to their value system, and not the predetermined values of the profession.

Doctors should be paid for what they do for patients, and not for what they do to patients. The generalist is not something less than the specialist. He could be something more. He should combine biomedicine with bio-psycho-social medicine, which is what the public seeks in health care today.

If we want to control the skyrocketing costs of health care, we need to get a handle on the partition between generalists and specialists. Generalists seem able to function adequately as both diagnosticians and therapists, without resorting to over-do resources use, now rather common among specialists.

And, finally, sir, the generalist could lead medicine back to the day when it was a humane, self-giving profession, and not a business, and, in the process, not lose one whit of science.

[The prepared statement of Dr. Koop appears in the appendix.]

Senator ROCKEFELLER. Thank you, sir. I want to say that Senator Mitchell, the Majority Leader, had particularly wanted to be here during your testimony, but he is absolutely up to his ears in managing business on the Floor right now. He will have questions, and apologizes for not being here. Senator Durenberger.

Senator DURENBERGER. Thank you, Mr. Chairman. Thank you, Dr. Koop. Thank you very much for taking the time to be with us today. I am trying to think of a couple of questions that I could ask you that would sort of get to the heart of the problem and the solution. I hear you say that we do have a problem, and the problem is one of values. And that there is, inherent in some places in the medical profession today, a sense of superiority that goes with the practice of a relatively defined and confined area of skill.

And the more it is paid, or the more it is publicized, or the more people that it will keep alive, or the longer it will keep them alive, that particular value is overwhelming all of the sort of traditional values in medicine, which are to keep people healthy, give them good advice, do not tell them what is really on your mind that is good for them. And then do a diagnosis that comes out of here rather than out of a machine, or something like that. Can you elaborate it? Because, if it is there, then the next question is, what do we do about it?

Dr. KOOP. Well, I think that you are on the right track. Virtue can be rewarded and worth can be appreciated, either economically, or by prestige and respect. The difficulty with primary care physicians is that they lack both of those rewards, the economic reward and the respect.

I have personally been on ward rounds with medical students and the professor of medicine in a medical school where a young lady gave a very bright reply to a question the professor asked, and he said: "You are brilliant. What do you expect to do with your life?" And she said: "I am going to be a primary care physician." He said: "Why would you ever do that? You are better than that." I think that anecdote summarizes the respect that a great many specialists in our profession have for those who seek primary care posts. So, you have got to approach them both. And they both have slipped so far that the task is daunting.

Senator DURENBERGER. Can you give us some clue as to where to begin? I mean, obviously, our role is to deal with the financing mechanisms. And, on the one hand, we are pumping money into the National Health Service Corps, and we are pumping money into a variety of other areas that aim at Family Practice.

But, with the other hand, GME, indirect, and direct medical education, we continue to finance the 70 or 80 percent of the people that continue to go into the so-called more rewarding professions.

Dr. KOOP. Well, I think that the economic situation can be cleared up much more quickly. There are two problems medical students have: their accumulation of debt, and their prospective income. According to their own admission, it is the lack of good fu-

ture income that influences decision for practice more than the debt.

But they tell you that in polls that are done at the end of their second year in medical school. And I do not think they are accurate, because there can always be a change. If you say, I am going to be a generalist, you can change that in the next 3 years and become a sub-specialist in whatever general field you chose.

So, I think we have to do something to immediately increase the income of primary care physicians, and I would go so far, sir, to say that government could do a lot by reducing the debt of primary care physicians.

If, for example, you were to say that this situation is so acute that every primary care physician, with a bona fide decision for primary care, will graduate from medical school debt free, it would cost this country only one quarter of one percent of what we will spend this year on health care—$2 billion. I think that is a pittance, compared to the problem we are talking about.

But the problem of correcting the prestige and self-worth image is much more difficult, and it is longer term. That is what I am trying to do. Because I think you have got to start back in pre-medical school days, and you have to build a profession—and we have lost this position with the public—that are public servants, built upon ethics, knowing what works and what does not work in medicine, and understanding that, no matter what you do for health care, it will flounder if it is not based on ethical prevention. And, on those three pillars, I think you can build the doctor of the future: Ethics, prevention, and outcomes research.

Senator DURENBERGER. I think you once said to me that we are either approaching the point, or if we would just think about this logically, that the cost of training what you call a generalist to do this much wider growing range of services, perform this much wider array of services with their much greater potential for cost, if you will, both to the society and to the individual, the cost of training that generalist may well be approaching, or may some day exceed the cost, if we do it right as a society, the cost of training one of these sub-specialists.

Dr. KOOP. Well, I think it will be a long time before that happens, unless we really look at the problem and extend generalist training for a number of years beyond what we do now. But I think that, in the long run, the differential between the cost of training the specialist and the cost of training the generalist is not what makes the difference to us.

As I talk to young men and women today who are making career choices in medical school, they are frightened to death by the accumulation of knowledge that has to be theirs if they are to practice competitively as a generalist. Now, they would accept that if there were a financial reward and a prestige reward, or at least one of the two. But now there is neither.

Senator DURENBERGER. And I am sure we will hear this, I know, from Mike Hodapp and Willmar, and probably from others, that the financial burden, if you will, of going into a small town practice, the family practitioner is facing the administrative costs of the reimbursement systems, every year you are hiring in a new administrator, and so forth.

The generalist, the family practitioner, the folks in pediatrics, and so forth, carry that burden to a much greater degree than does the specialist, who sits in the clinic doing one thing, two things, three things, or whatever, and they are billing out in the same fashion to everybody. That is another thing that seems to bother these people.

Dr. KOOP. Well, it is another factor. And the over-burdening administrative cost is more difficult for the low-paid primary care physician to afford. I think most primary care people realize their staff, no matter how small it is, spends more time on paper work for patients than the physician does doing a physical and a history on the patient.

Senator DURENBERGER. Thank you.

Senator ROCKEFELLER. Thank you, Senator Durenberger. I am interested, Dr. Koop. You know, you are talking about the matter of prestige and pay. And I find it very interesting that women, much more than men, go into general family practice, blacks more than whites go into general practice, Hispanics more than whites go into family practice. So, there is clearly, somewhere in all of this mix, a potential to tap a feeling of obligation, responsibility, and commitment.

Thanks to the Kellogg Foundation in West Virginia, we are making, causing our three medical schools who do not like working together, to do common training. And the professors will do it with them out in rural health clinics so that they will be exposed to primary care at the most direct level.

And it is my expectation, indeed, as are the results with the National Health Service Corps, that human nature is still all right in America, and that the qualities of commitment can still be all right in America because 40 percent of National Health Service Corps personnel stay where they were sent, which is rural, isolated areas, or inner city, urban areas.

So, the money is absolutely basic. But the siege, the sense of where the obligation is—it is clearly there. Now, the question is, we are talking about a long-term RBRVS, or whatever. We have got outcomes research, which is going to help. But what, in the short-term, can we do, other than what you have suggested, which I think is a good suggestion. That is, take medical school students and say, if you are going to be in primary care, you are going to come out of the thing debt free.

Now, you may have to, at some point, do something in return. We can talk about that. But what are some more short-term things that we can do? I mean, medical schools are going to be very hard to turn around. They will be very hard to turn around. That is a long war that has to be fought. What are some other short-term solutions?

Dr. KOOP. I think it is a long war, Senator. But, on the other hand, I have not talked to a dean of a medical school in the last 2 years who was satisfied with the product he turns out. I do not talk to medical school classes who say, gee, this is the greatest education we could possibly get. And certainly the public is totally dissatisfied with the outcome of both the educational process and the recipients thereof.

So, here you have a system where everybody that is involved in the health equation is dissatisfied with what is going on, so the time is ripe for change. I do not know how to bring about a public relations campaign that increases the worth of a primary care physician in the minds of the public. But you mentioned three things which I think require some elaboration.

Frequently, minority medical students feel called to serve their own people. So, that is the call of poverty, too, as well as commitment. It is commitment, but there is a special circumstance there. The other thing you mentioned was women. I am sure you know that, within a few years, the women graduates of medical school will reach parity with men. And that will bring about a change in the entire countenance of medicine.

I believe very firmly that women are more naturally caring people than are men, and I think that we have placed so much evidence on curing in this country when we talk about curing and not enough about caring, that the advent of parity by women will be a very welcome addition to this profession.

But it raises other questions, you have to be aware of, if you are going to be begin to dabble with manpower. Many of these women who will be graduating from medical school will want time away from their profession for birthing and parenting, and that will have economic implications on the way medicine is practiced.

And this is one of the think-tank obligations that we are taking on at Dartmouth to look at what is going to happen to the practice of medicine, both in practice and financially, when women do reach parity.

I am afraid I do not have a short-term answer to the question you specifically asked. And I think it has to be approached on as many fronts as possible. But I think the best guarantee in the long run is to make it very clear to the pre-medical student that he has joined a very special guild, provide him with opportunities to view role models, and, after 8 years of nurture, turn him out to the public the kind of a person you would like him to be.

Senator ROCKEFELLER. There has got to be an enormous relationship—peer pressure, prestige, all the rest of it—between how a medical school speaks to its residents and students and what type of medicine they end up practicing, whether it is general medicine or a specialty.

Dr. KOOP. Without question.

Senator ROCKEFELLER. There is, as far as I know, no rule that says that a medical school has to have any family practice.

Dr. KOOP. No.

Senator ROCKEFELLER. Schools do not have to offer or teach family practice. And it is a fact, is it not, that up to 25 of our medical schools have absolutely no family practice medical teaching whatsoever.

Dr. KOOP. That is correct. And it is also true that the greatest number of family practitioners get into practice from the schools that do have family practice programs. But there are many other aspects of that. You referred to one of them before when you said in West Virginia they would be teaching in rural areas.

We do not teach medical students today in any climate that would encourage them to go into Family Practice. If you are getting

all of your critical training in an intensive care unit, where most medical students get it today, there is absolutely no concern about either prevention, or primary care.

So, it has got to be something that is instilled in that young man or woman from some other source than the mentors he or she runs into in medical school. And that is why I said there have to be conceptual changes in medical education.

Senator ROCKEFELLER. I have abused my time here, and I apologize to Senator Daschle and Senator Baucus. But I have talked with you before about an experience I had when I went to the Yale Medical School. I do not think the Harvard Medical School has a family medicine practice. I believe that Harvard does not.

Dr. KOOP. They have a program in the community that I think dubs for it.

Senator ROCKEFELLER. All right. But I remember going to the Yale Medical School right there in New Haven, which has the highest infant mortality rate in the country. And I asked to speak to a number of medical school students, as many as I could get, that were physicians, physicians assistants, and the public health people came, nurse, nurse practitioners; a very broad array.

And then, also, some faculty. And not only did they tell me that they were being taught nothing about prevention. Forget family practice. But nothing about prevention. But that they, as individual classes of providers being trained, had never seen each other in the course of their Yale careers.

The physicians, not just individually, had not teamed up with the nurses. The nurses, the nurse practitioners, the public health school people. I mean, there was just no communication. And I am kind of wondering. How does all of this thinking get put together that we allow those things to happen?

Dr. KOOP. Well, I think the way medical schools and medical education develops is that one or two schools pick up the challenge and say, we will be the pilot program.

The reason that we have the kind of medical schools that we have today that are research-oriented, very high-tech, functioning in the center of a research-oriented university is because of the Flexner Report of 1910, and that is what it called for.

Many people missed the fact that Dr. Flexner started out by saying, the whole purpose of what we are doing is to care for the individual, the family, and the community.

They missed that, and just jumped to the university and high science. But today, most medical schools are following what Johns Hopkins said they would do in 1912, and that is to be the pilot program. I think it is time we had some other pilot programs to accomplish what you are talking about.

Senator ROCKEFELLER. Thank you. I apologize to Senator Daschle, whose turn it now is.

Senator DASCHLE. Thank you, Mr. Chairman. Dr. Koop, you have mentioned two things now that I would like to follow-up on. The first was quite a dramatic statement about your conversations with medical school deans. If I recall, you said something to the effect that, over the last couple of years, you have not talked to a dean who has been satisfied with their results.

In essence, 100 percent of the deans that you have spoken with have indicated that, to a large extent, they have failed to reach whatever goals, whatever level of satisfaction they would like to see within their own schools.

And then you mentioned the Flexner Report just now. I am told that that was really the last time we have had a comprehensive evaluation of school curricula, and that, as a result of that comprehensive review, we made some changes, the likes of which we really have not seen since then. Is it time for a Flexner Commission again? Would you suggest something of that magnitude?

Dr. KOOP. Well, it is already under way, sir. The Culpepper Foundation has already published another Flexner-type report; and a tremendous report, a very comprehensive one, from the PEW Memorial Trusts. And, at the present time, the Carnegie Foundation for the Advancement of Teaching, which funded the first Flexner Report, is putting the finishing touches on the present Flexner Report.

Senator DASCHLE. When will that be made available, do you know?

Dr. KOOP. I think by the end of this year.

Senator DASCHLE. The end of this year. You mentioned also that it was your view that women, in particular, were more capable in dealing with the human element in practicing medicine. To the extent that I have had conversations with a lot of physicians who have expressed a similar concern, their recommendation was that we begin to get away from the heavy orientation towards science and that we understand more the need for more curricula related to better human relationships. To what extent do you think that would be helpful in preparing doctors for more of a primary, generalist role?

Dr. KOOP. I think there is no doubt about the fact that you have to take some very intricate science out of the curriculum in order to make room for some more humane things and community service that you would like to do.

But I think it would be wrong to focus attention on either/or. It is not the science of medicine or the art of medicine, it is both. And it is not curing or caring, it is both. And I think that we can have both.

And I think that the ideal physician to turn out in the next century has nothing to do with what specialty he chooses. I think if we do it right, you could turn out a surgeon, a cardiovascular surgeon, a specialist-specialist, who still thought like a family doctor.

Senator DASCHLE. How radical a notion is that? That sounds to me—

Dr. KOOP. Not very.

Senator DASCHLE. Would you not find significant opposition in the medical education community if you were to go to a dean and say, I think that we ought to move perhaps 10–20 percent off of your scientific orientation in this curriculum towards a more human relationship orientation. That would not generate a lot of opposition?

Dr. KOOP. Well, I can tell you what the conflict centers around. The first thing they talk about is time. And the faculty is willing to cut 10 or 15 percent of the time, but not 10 or 15 percent of the

content. So, what that means is that you are adding things without taking anything away. The people who fight curriculum change most, in my experience, are the basic scientists who would be the most threatened.

But I think we have come to the point where people realize that the intricacies that you have to know, about anatomy, for example, if you have to know them, you will get them again. A hand surgeon does not learn his final understanding of the anatomy of the hand when he dissects a cadaver; he learns that in his residency program 5 to 7 years later.

So, I do not think that you are threatening the basis of medical education if you cut some science out in the beginning, but add it heavily when you need it at a later time. But that allows the generalist to have a smattering of everything that he needs and not be over-burdened in the learning years by things that he will never use again.

Senator DASCHLE. I had an interesting discussion with a physician a while back about this issue and the response by the physician was, I do not need schooling to tell me that I have got to have a good relationship with my patients. That is just human nature, and we are in the wrong business if we do not have that kind of understanding to begin with. I am afraid I did not respond adequately to the doctor to convince him otherwise. What would you tell a doctor concerning that?

Dr. KOOP. I think there is a lot of instinct and general understanding that some people have more of than others. It is very hard to teach someone the proper patient/doctor relationship, but you can exemplify it, and that is where mentoring and role models come into being so importantly.

You cannot sit down and tell a medical student how he would approach the 30-year-old mother of a 3-year-old child with leukemia and say, "we have run the gamut of all treatment options and your child will die."

But you can sit down and watch and older physician do that with such expertise that he makes that situation as bearable for the person in question as possible, but also offers all of the supporting undergirding that that institution and that community can provide the afflicted individual over the next few years. You pick that up by osmosis.

Senator DASCHLE. Well, I know I am out of time. It is great to have you with us this afternoon, Dr. Koop. I thank you.

Dr. KOOP. Thank you.

Senator DASCHLE. Thank you, Mr. Chairman.

Senator ROCKEFELLER. Thank you, Senator Daschle. Senator Baucus.

Senator BAUCUS. Thank you, Mr. Chairman. Dr. Koop, I apologize for not being here when you spoke earlier. I understand essentially you are saying that, in your judgment, we have proportionately too few primary care physicians and too many specialists.

I take it you think, perhaps, rural America is not adequately served as well as urban America. Without putting words in your mouth, perhaps we need, in addition to medical doctors in rural America, maybe nurse practitioners, physician's assistants, and

other health care providers. Is that a somewhat accurate summary of what you said?

Dr. KOOP. I did not mention in my testimony that we needed nurse practitioners and physician's assistants. But I think the future lies with those people who understand that the comprehensive medical team will use all those physician extenders that it possibly can.

The other thing that I did not quite say is that things are tough in rural America, but not in the cities. They are tough in the cities if you are poor. So, the lack of primary care physicians is primarily in rural America and in poor, urban America.

Senator BAUCUS. Now, what do we do about all of that? Do we, as Members of the Congress and Senate, direct the portion of dollars that go to the GME program that go to primary care residencies as opposed to others? How do we get a handle on this to encourage more primary care residencies.

Dr. KOOP. Well, I think the problems are both attitudinal and economic, and I think there are things that could be done immediately economically. In the previous testimony, we heard about how it was planned to have more money for the cognitive services of primary care physicians.

But, after it had been milked a little bit by HCFA, it did not come out quite that way. I think there should be a second try at that, and I think we have to have some kind of a quality assessment between cognitive medical consultation and people who get paid just for doing procedures.

What I said in my testimony was that we have to begin to pay physicians for what they do for patients, not what they do to them, which is what we are currently doing.

I think that, at a Federal level, Congress could very well consider whether, in our present shortage of primary care physicians, one way out would not be to graduate all of those who are bona fide applicants for primary care careers, graduate from medical school debt free.

And I pointed out that that would cost one-quarter of 1 percent of what we will spend this year on health care in America, which seems to me to be a very small piece to get what we are trying to buy.

Senator BAUCUS. And what legitimate, if any, objections would doctors or others have to that proposal? I know some specialists would say it was unfair.

Dr. KOOP. Well, I am sure every specialist would say it was unfair if you were going to reduce the debt of a primary care physician. But, on the other hand, that is what the marketplace calls for at this time.

I can see a day ahead when you might be charging different interest rates for medical education loans if one were going to an over-crowded specialty as compared to an under-served specialty, such as we are talking about.

Senator BAUCUS. And you think writing off the loans might be enough economic incentive for those physicians to stay in those rural areas?

Dr. KOOP. If you talk to the people who are concerned about this—that is, the individual physicians themselves—they would tell

you that their choice of career depends more upon the lack of money they will make than the burden of debt that they carry.

But most of the studies that have been done on young medical students earlier than you can get an accurate answer. So, I think that reducing the debt would have a significant effect upon the number of people that go into primary care.

Senator BAUCUS. Should we get into the curriculum of medical schools?

Dr. KOOP. No, I do not think you should. I do not really know how you can. And I think that it can be done on a voluntary basis. I think when it begins to work in one place, it will spread like wildfire.

Senator BAUCUS. Well, I think you are right. I spent about a week in Canada last December trying to better understand the Canadian system, and learn. You know better than I, they have many more primary care physicians compared with specialists. And, also, as best I could understand it, doctors in rural Canada often have a better opportunity to make more money than in urban Canada, essentially because of the system. It is fee-for-service, and so forth. There is not as much competition in rural areas.

Dr. KOOP. Right.

Senator BAUCUS. And deans of medical schools in Canada would also tell me that they think that there is too much of an emphasis in America on education of specialists in residency compared to Canada. And I also tend to think that if we can encourage more primary care treatment, there are lots of other benefits as well. There may be a lower incidence of medical malpractice. I just think, to some degree, if you get to know your doctor better, you are less likely to sue your doctor.

Dr. KOOP. No question about that.

Senator BAUCUS. There are lots of benefits here. I just hope that we can frankly make some headway in this area. I thank you for your help.

Dr. KOOP. Thank you.

Senator ROCKEFELLER. Dr. Koop, I really thank you. I hope that you see, when these offerings come, that the medical community and the medical education community will be responsive. I mean, it is like the whole question of outcomes research. Lots of work is going into outcomes research and it is going to take time, and it is going to lead to practice guidelines.

And that question is, are doctors going to be responsive to that, are doctors going to accept that. Well, the same question, if we change incentives, do various things, will medical schools accept that? Will they change?

I mean, the need is obvious for more primary care doctors. The financial incentive is very un-obvious, because there is not one right now. I just hope that you will continue to push, fight, and shove to get us, in this country, to do the right thing.

Dr. KOOP. Thank you.

Senator ROCKEFELLER. And I know that you will.

Dr. KOOP. I have one other statement to make about that. It depends on when you acquaint a physician with outcomes research. If you do that after he has established all of the patterns he learns in medical school and residency, and then he reads what outcomes

research is all about in a journal, he is very much less likely to pick that up than if you raise him in medical school knowing what works and what does not work, and asking him, then, to perform his practice according to those lines and patients' values.

Senator ROCKEFELLER. Thank you, sir.

Senator BAUCUS. Mr. Chairman.

Senator ROCKEFELLER. Yes.

Senator BAUCUS. If I might say to Dr. Koop—this is a bit risky—that you have a big following in this country. And I encourage you to take advantage of it. It reminds me of the old E.F. Hutton ad, that when E.F. Hutton speaks, people listen.

And there is a question of how much capital you can expend, but I just urge you to take advantage of the stature that you do have, because there are a lot of us in America who very much listen to you, and look up to you, and I just urge you to help us, together, to solve a lot of these problems.

Dr. KOOP. I try. I hope the feeling lasts. [Laughter.]

Senator BAUCUS. Thank you.

Senator ROCKEFELLER. Thank you, Dr. Koop. Our next panel consists of Dr. Philip Lee, who is chairman of the Physician Payment Review Commission, which makes him a brave soul, by definition; and Dr. Steven Schroeder, who is a general internist, who is president of the Robert Wood Johnson Foundation, from Princeton. I have very strong and positive feelings about both of you gentlemen, and I am glad that you are here. I look forward to your testimony, perhaps starting with you, Dr. Lee.

STATEMENT OF PHILIP R. LEE, M.D., CHAIRMAN, PHYSICIAN PAYMENT REVIEW COMMISSION, SAN FRANCISCO, CA, ACCOMPANIED BY DR. LAURE LEROY, DEPUTY EXECUTIVE DIRECTOR, PHYSICIAN PAYMENT REVIEW COMMISSION, SAN FRANCISCO, CA

Dr. LEE. Thank you very much, Mr. Chairman. I am accompanied also by Dr. Lauren LeRoy, who is the deputy executive director of the Physician Payment Review Commission, and has actually worked with me on these issues for the last 21 years.

I would just like to submit for the record the testimony, and make three points in terms of the work that the commission has done to date on the issues which have been discussed.

The number of physicians, in the commission's view, exceeds or will soon exceed those required to meet the Nation's health care needs. That over-supply has consequences in the United States that are more serious than in any other country, because we have no national policy with respect to cost containment, so that every additional physician increases the costs more in the United States than in Canada, or Germany, or Great Britain.

Second, the commission assumes that the Nation is training too many medical sub-specialists, and too many specialists in some surgical fields, relative to primary care physicians.

Third, the commission assumes that many physicians in both primary care and other specialties lack appropriate training and experience to prepare them for practice in ambulatory settings, particularly in the continuing care of patients with chronic conditions and the coordination of care of patients with complex problems.

Mr. Toby mentioned this. He mentioned the potential HCFA initiatives with respect to changing the financing and with respect to funding in ambulatory settings, as opposed to just funding through the hospital.

It is our view that graduate medical education financing through patient care revenues paid to the hospitals is a powerful barrier to changing the site of training and also to creating the balance between the service needs of the institution and the educational needs of the student or the resident.

Senator ROCKEFELLER. Dr. Lee, which is the barrier?

Dr. LEE. The mechanism we currently use for paying hospitals for funding graduate medical education.

Senator ROCKEFELLER. All right.

Dr. LEE. And I am going to speak only about the direct payments. We believe the indirect payments are really a subsidy to the hospitals that are not directly related to medical education, but, because of their patient care responsibilities.

And I think to call them an indirect medical education payment, one can use that terminology. But, in fact, it has to do with teaching hospitals, patient care responsibilities, as opposed to their educational responsibilities, in my view.

The commission dealt with some of these issues as background to its 1992 report. For the 1993 report, we will be considering a number of policy options, and I just want to review with you some of those.

First, in the area of financing, there is the broad question of whether financing should be paid for through third-party payment, or some other mechanism. Should, for example, Congress decide to fund medical education as it funds basic research through general appropriations, through an annual appropriation? That is a possibility. It seems to the commission unlikely, however, so we are focusing on modifications of payment through the patient care mechanism. We will assume that patient care revenues will continue to support graduate medical education.

Then the question comes up, should the payments continue to be made to hospitals? There are multiple alternatives which we will be considering. In Canada, as you pointed out, they pay the medical schools, not the hospitals. There are consortia that could be paid.

You could pay—as NIH does, or as the Agency for Health Care Policy and research does—for graduate medical education through the residency program itself. The Family Practice program, for example, at U.C. San Francisco supports residency programs in four different hospitals.

Payment could go to that department in a medical school. So, there are multiple ways of payment, once you decide on the financing mechanism. And, of course, that will significantly influence the outcomes.

Site of training. We think that more emphasis needs to be placed on ambulatory training, and that will require, we believe, a change in the funding mechanism. Therefore, that needs to be looked at.

The physician supply, the physicians in the pipeline. That has been mentioned. If we look at the growth in physician supply, recognizing that it has not met the needs in West Virginia; it probably

has not met the needs in a number of other States represented at this hearing. Nonetheless, there is, I think, a very serious question about the over-supply, and how you deal with that.

One, you can deal with it through medical education in the United States and the number of medical students enrolled. Those have been relatively steady, and we do not think that those are likely to change dramatically. However, the number of residents has increased. There are now 83,000 residents-in-training. That number increased by 35 percent in the 1980s, without any significant increase in the population.

Also, we have drawn heavily on international medical graduates; their numbers have gone up and down somewhat but I believe 18 percent of the current residents-in-training are graduates of foreign medical schools not approved by the Liaison Committee on Medical Education which accredits the medical schools in the United States and also in Canada.

So, one option that the commission will be examining is whether there should be limits in payment. In other words, whether the Federal Government should only pay for training of physician graduates of programs approved or accredited by the Liaison Committee on Medical Education.

That is one issue. The second major issue that has to be dealt with is how you deal with the specialty mix and the over-supply of sub-specialists. I mentioned that financing currently, as you all know, is through the direct payment to the hospitals.

Instead of using that mechanism—and, again, the commission will look at this option very carefully—you could put a 1 percent tax, if you will, or a 1 percent withhold on all third-party payments for patient care. You set up a fund for graduate medical education which represents 1 percent of the dollars going into patient care.

That fund, then, could be administered by HCFA, it could be administered by the Public Health Service, it could be administered by an independent commission, which would then regulate the number of residencies and the specialty distribution.

Ensuring the quality of those residencies would remain with the residency review committees, the same mechanisms we use now. But, clearly, the current mechanisms do not adequately deal with the total number, or with the specialty mix. That is just one option the commission will be looking at.

Finally, the issue of the role to the resident in meeting the patient care needs as opposed to getting their educational needs met. I think in every residency program, particularly in tertiary care institutions, residents complain that they are on a liver transplant service, that they are on another specialized service, where they are not really learning the kinds of things they are going to have to do in practice.

Moreover, there are very substantial differences in the number of residents per capita between a State like New York, which has three times as many residents, per capita, as California.

Now, it means to me that, in New York, they are probably using residents much more to meet patient care needs of low-income populations in the urban areas than we are doing in California. I do not know that that is for sure, but we will examine that question.

The issue of this experience, how to provide incentives for the hospitals to meet those patient care needs—with nurse practitioners, with physicians' assistants, with fully-employed physicians after they have finished their training—is another option that needs to be looked at.

Then, there was a lot of discussion earlier today, particularly with Surgeon General Koop, discussing the primary care needs and whether you should relive the medical students of their debt. There are other options for using that $2 billion that should be considered.

One, would be to support the National Health Service Corps, where you would have a much more targeted response in meeting the needs of rural States such as West Virginia, South Dakota, or Montana.

I think it could be much more effectively met through a mechanism like the National Health Service Corps than through a broad-based relieving of debt for, let us say, a general internist, who is going to practice in Palo Alto, or in Stanford, Connecticut, or Boston, where they will have very adequate income over their lifetime.

Whereas, those who go into the under-served areas, whether it is a rural area or a urban area, could be assisted through the National Health Service Corps. That is a more effective alternative. But, again, that is an option that really needs to be looked at.

That is just a very brief overview, Mr. Chairman. The commission will be examining these policy issues. We will be recommending to the Congress next March in our annual report the recommendations of the commission with respect to these different set of policy questions. Thank you.

[The prepared statement of Dr. Lee appears in the appendix.]

Senator ROCKEFELLER. Dr. Lee, thank you. It is interesting that, beginning in 1980, there were 6,000 National Health Service Corps personnel sent out across this country into rural areas and underserved urban areas. And, by 1990, 6,000 had become less than 100. I mean, just an enormous drop off. And, hence, a lead-in to our next witness, Dr. Schroeder.

STATEMENT OF STEVEN A. SCHROEDER, M.D., PRESIDENT, ROBERT WOOD JOHNSON FOUNDATION, PRINCETON, NJ

Dr. SCHROEDER. Thank you, Senator. I would also like to ask that my written comments be entered into the record.

Senator ROCKEFELLER. Absolutely.

[The prepared statement of Dr. Schroeder appears in the appendix.]

Dr. SCHROEDER. In my brief comments today, I will summarize why the specialty distribution problem of physicians is an important national issue; why the problem will not automatically self-correct; what steps the Robert Wood Johnson Foundation is taking to look at this problem; and what others might do.

Central to my argument is that the most important component of a Nation's health care system is its supply of physicians. It is the decisions of doctors that most determine the kind of medical care that we will receive. It is no accident that our Nation has, by far, the most expensive health care system in the world.

To combine fee-for-service payment of medical care that disproportionately rewards the use of expensive medical technology with the medical manpower supply of highly-trained specialists guarantees high spending.

Make no mistake about it: we have a lot of specialists. At last count, as you have heard today, over 70 percent of our Nation's physicians are specialists. In every other country, that proportion is less than 50 percent, usually around 30 percent. And the proportion of 70 percent specialists in this country is rising.

And, in the most recent graduating class of medical students, less than 15 percent wanted to become generalists. Let me repeat that. Less than 15 percent wanted to become generalists. Some of those who do become generalists do so because they cannot secure a residency in ophthalmology, or ENT, or anesthesiology, or radiology. So, the market has a long way to go to correct that.

What is wrong with having so many specialists? Is not specialism what this country is all about? Well, the answer is that, since physicians do determine most of the decisions about medical care, or, as economists say, supply creates demand, then too many specialists equals too much specialty care.

Specialty care is expensive, it is often risky, and it requires skill and practice. Too many doctors doing too much specialty care translates into high costs, over-use, and poor quality, on the one hand, and many missed opportunities for prevention—as Dr. Koop has mentioned—for coordination of services, and for access to basic health care, on the other hand.

How did we come to have so many specialists? In most countries, there is a national health manpower policy that adjusts the mix of doctors. But, in the United States, no one is in charge of health manpower.

We have evolved a voluntary system that looks to academic medicine, especially its teaching hospitals, to allocate doctors by specialty. One might suppose that such a voluntary system would adjust specialty mix in response to pressures from the marketplace, but that is not likely to occur because the market is not perfect.

The producers of specialist physicians—the teaching hospitals and their faculty—are, not surprisingly, responsive to their own perceived interests, not those of the general public. The relative prices for physician services have historically been determined by doctors in particular specialists, not by market forces. And patient demand is greatly influenced by physicians.

Although some recent efforts are occurring to change these dynamics, such as the attempt of the RBRVS and the growth of health maintenance organizations, which do give generalists a more central role than occurs in fee-for-service medicine, we believe that the consequences of an unbalanced specialty mix are so serious as to warrant national intervention. That is, the number of generalists should be increased, and the number of specialists decreased.

The interventions should have two targets: they should aim to improve the circumstances of generalists practicing in the community, as well as change the mix of physicians produced in undergraduate and graduate medical education.

Senator ROCKEFELLER. Dr. Schroeder, do you mean national government intervention? What do you mean? I am sorry to interrupt.

Dr. SCHROEDER. I think it is going to require a national effort, both public and private sector, Senator.

Senator ROCKEFELLER. All right.

Dr. SCHROEDER. Fostering such interventions is a role for both the public and private sector. And, in recent years, the Robert Wood Johnson Foundation has invested more than $63 million in programs to foster the training of generalists and to create a more hospitable environment for generalist practice. These strategies being used in the programs are detailed in my written statement.

The foundation also supports three separate efforts to increase the number of under-represented minorities in the medical profession and has recently developed a program to strengthen the role of private physicians in meeting the basic health needs of underserved groups.

We believe these efforts are important, and will work to make them as successful as we possibly can. But it is only going to take that concerted national effort, public and private, to reverse the current health manpower trends.

The first step, a very simple one, will not cost any money. It must be to acknowledge the problem and to work towards its resolution. Solutions aimed at improving the practice of generalism could involve reducing payment disparities that, as Dr. Koop mentioned, so disproportionately reward the use of medical technologies.

They could involve experimenting with other financial incentives, such as selective loan forgiveness, or discounts on malpractice premium, or bonus payments from third-party payers. This is an important issue that has not been mentioned yet today. They could reduce the burden of the incessant cost containment hassles that fall disproportionately on the shoulders of office-based doctors, especially generalists.

And, finally, we must look for ways to enhance the prestige of generalism. But that cannot come about just with a marketing campaign; it has to really reflect an enhanced value of generalism.

Other incentives could be directed to academic medical centers, which could be reminded of the public trust inherent in their educational mission: to provide physicians to meet the Nation's manpower needs.

The graduate medical education system might be prodded to train more generalists by tracking what really happens to the billions of public and private dollars earmarked for residency training, as well as by reviewing the extent to which anti-trust barriers actually inhibit the redistribution of residency positions.

What if we do not take such steps, or what if we take them and they do not work? I have been hearing, now, for the last 20 years, that a change in medical manpower is just around the corner.

Well, the simple fact is that, if we are forced to continue with a medical work force that consists of 70–85 percent specialists, then I think we must take draconian steps.

In such an event, I believe we must reduce the total size of the physician work force. This means maybe down-sizing medical student enrollment from the current about 16,000 graduates per year

to 10,000 or 12,000. Because if we do not, we are never going to be able to control the problem of rising costs of health care.

Changes in physician supply policy may take many years to be felt, but their implications are long-term and profound. This generation must safeguard the future of our health care system for the generations that follow by bringing the Nation's mix of physicians back into balance with its health care needs. Thank you.

Senator ROCKEFELLER. Thank you, Dr. Schroeder. First, questions from Senator Durenberger.

Senator DURENBERGER. First, gentlemen, I thank you very much for being here. I apologize for being on the telephone for part of your presentation. I want to say to you, too, Steve, that I am eternally grateful to the Robert Wood Johnson Foundation for everything that they do. I am sold.

I remember when your predecessors came to Minneapolis to talk about what should be done with this money when the foundation first started. And I wish I can remember what I suggested, but it probably was not health policy. [Laughter.]

But there are many gifts that you have left for all of us because of the work that you are doing.

Dr. SCHROEDER. Thank you, Senator.

Senator DURENBERGER. The first proposition that I would lay out here is that because there are a lot of specialists in this country, or for whatever reason there is, a lot of specialists or sub-specialists are doing the work of primary care physicians.

And I am quoting from something that Phil Lee's organization puts out, which said, "While sub-specialists may be well-suited to serve as principal providers for some patients, there are questions about the quality of care that they provide outside their field of expertise." It is sort of a logical conclusion one might come to. Is it true?

Dr. LEE. If we said it, it is true. [Laughter.]

Senator DURENBERGER. All right. Second, Steve, any comments?

Dr. SCHROEDER. I cannot follow that one, Senator.

Senator DURENBERGER. All right. I take it you agree with it.

Dr. LEE. I would say, Senator, on that, if you think about, let us say, an invasive cardiologist who is very expert in that area, a patient who has had, let us say, coronary artery disease, very well treated by this specialist, comes in with some functional bowel complaint, or let us say headache or backache, that physician is not, one, well-trained in those areas, and not particularly interested to deal with those kinds of problems.

I mean, that is, I might say, an extreme example. But I think there are many others where the specialists is really well-trained to work in those more narrow areas, and, as a result, cannot deal with the scope of problems that Dr. Koop mentioned in his comments.

Senator DURENBERGER. Yes. Thank you.

Dr. SCHROEDER. I think there is a second component to the problem. And that is that, if you have more specialists than are needed to treat the disease burden, then they wind up doing some things that the patients do not necessarily need.

Some of those patients are going to get into trouble from those operations. So, that is essentially bad quality in their specialty.

The technical quality may be very good. The batting average may be terrific. But if you are doing a procedure that is not needed, then there is going to be trouble.

Senator DURENBERGER. The second proposition may also be self-evident. "Care provided by specialists is actually more intensive and more expensive than provided by generalists. Specialists spend more time, order more diagnostic tests, prescribe more medications, and schedule more return visits than generalists for patients with the same condition." General agreement?

Dr. SCHROEDER. That is true in two areas. We are beginning now to get evidence that that is true, even when specialists and generalists are handling patients in the specialist's domain.

For example, data from the Medical Outcomes Study at the New England Medical Center show that if you have an endocrinologist treating a diabetic, or a cardiologist treating someone with heart failure, even when you correct for the severity of disease, they are going to spend more per patient than a general internist or a family doctor. It pertains also to specialists practicing outside their specialty.

Let us take an example. Let us say I am a cardiologist in practice, and an 18-year-old woman comes in to see me and she has an infection of her bladder. I will probably treat that infection, but I will listen real hard for a heart murmur. And I am liable to hear a click, and I am liable to order an echocardiogram. And what should have been a $40 visit is going to metamorphose into a $300 visit.

Dr. LEE. There is another side to that coin, however, for many patients with chronic illness and complex problems. Let us take a diabetic patient with a complex problem. They may be better served by the specialist or sub-specialist in that particular area.

It does not just necessarily follow in every case that the specialist model or the sub-specialist model is not the most appropriate care for that patient with that particular problem.

So, I think that, although some of the research would suggest, as Steve has pointed out, the generalist is less expensive, I think there are other situations where the specialist is absolutely essential.

Dr. SCHROEDER. Yes. We clearly need specialists. The question is, how many do we need?

Senator DURENBERGER. Let me ask just one general question. Is the real problem here not the fee-for-service medicine in this country? I mean, is that not the heart of the problem?

Because if you have got 9,000 different procedures you can bill out, and then you can tie these procedures to your particular specialty and you can put a dollar sign that goes on this procedure than if you are a sub-specialist than if you are out in a small town in South Dakota, or Minnesota, or West Virginia.

And if we really got serious about this business, and rather than having the government tell us how many sub-specialists we need, and so forth, if we think about abandoning the fee-for-service system and going to a system in which you encourage organized delivery systems of some kind producing appropriate outcomes, might we not eventually get where we ought to get?

Dr. LEE. In many areas of the country we would not; in some areas we would. But you cannot have organized systems, capitated pre-payment systems, in areas that are too widely scattered geographically. You do not have enough patients for the urologist or the neurosurgeon.

And fee-for-service, I think, works reasonably well in those areas. I mean, costs are relatively low in areas like West Virginia, Idaho, or Montana, compared to California and New York where we do have very large and significant percentages of the population in these managed care systems.

The problem is more complex because we have an unimpeded flow of technology into our system. We have NIH funding billions of dollars of research which results in new technologies. We have almost no disincentives and lots of incentives to bring that technology in.

So, even when you have HMOs, as, let us say, Kaiser Permanente in California, they are forced to take on those new technologies, to some, maybe less extent, than in the fee-for-service because they are available, because there is a demand for them. The physician supply—as we have been pointing out, there are too many specialists—drives the system so that you have got to have multiple other changes. And I am certainly one who strongly favors capitated pre-payment with good group practices. But that alone is not going to solve the problem.

Dr. SCHROEDER. Yes. I would say that there are two levels to your question. One, is, is there anything theoretical about fee-for-service? I could give you a fee-for-service system that would create disincentives for the use of high-cost technology. So, it is the way that we have constructed this fee-for-service system that I think is right at the center of the problem. I think you are absolutely right.

Senator DURENBERGER. Thank you, Mr. Chairman.

Senator ROCKEFELLER. Senator Daschle.

Senator DASCHLE. Dr. Schroeder, I am delighted to hear your last comment, because I think that is the point. We have designed a system that has produced the result. And if we want a different result, we need to produce a different system. And I think that both of you have made that point in various ways.

Let me, first of all, say something related to what Senator Durenberger said about your contribution to health care. Those of us in the Senate have been the beneficiaries of your fellowship program. And I must commend you and urge you to continue it. They are extraordinary contributors to the process here, and we appreciate it.

Dr. SCHROEDER. The fellows love it, Senator, too. They really do.

Senator DASCHLE. Some of the fellows may love it. Subjected to it——

Dr. SCHROEDER. The ones here have all told me they love it. [Laughter.]

Senator DASCHLE. Absolutely. It is unanimous. They all just really enjoy it. You had mentioned that part of the problem is the prestige—or lack of it—that generalists have in medical school that creates part of the problem. Could you elaborate on that a little bit? To what degree is there a stigma attached to a medical student wishing to become a generalist? Do they have to explain their——

Dr. SCHROEDER. Well, you heard a poignant anecdote from Dr. Koop. I think, in general, it is not that bad, but it is not good. Most of the leaders in academic medicine do not understand what generalism is. I do not think they stigmatize, I think they really do not comprehend it.

I practiced generalism; I still do, to a limited manner. And, at one point, I actually spent a year as a sub-specialist. I found it more of an intellectual challenge to be a generalist because the boundaries are so wide, and you cannot say, this is the limit of what I am going to do, if it falls outside of that, go see someone else.

But the deans and the department chairmen have never done generalism, do not understand it. They work in academic centers that create rewards for specialization. So, I think what happens is there is not much of a selective reinforcement and there is probably some extinction of a desire to be a generalist. And, in some cases, it is as bad as what Dr. Koop said.

Dr. LEE. But I think that there are other cases. I, like Steve, want to comment on this. At U.C. San Francisco, the Associate Dean, Emily Osborne, has just finished a study of the graduates of UCSF, which is one of the high-tech, academic medical centers with a lot of research money.

But, in fact, half of our graduates go into primary care specialties, even after 3 years of the residency training, when they often then go into sub-specialties, which was a surprising figure to many of us on the faculty, because of the attitudinal problems. Steve taught there for many years and created the division of general and internal medicine, which had a significant influence on those students. So, I think that there are situations where, if you can create structurally the situation where students get exposed to generalists in those environments, many of them will choose a generalist career.

Dr. SCHROEDER. Students come to medical schools wanting to be doctors. They really want to be doctors. But they do not get much exposure, in most medical schools, to good, generalist physicians. And the experience I have had is, when they see them, they love them. And there are many of them who actually want to choose that as a career. It is not the only answer, but it is a help.

Senator DASCHLE. Well, the impression I have is that there is an environment from the very first day you enter medical school that really has a couple of messages. One, is that if you really want to go where the action is, you have got to go where the technology is, and the technology is in specialization.

And, two, if you have any common sense, you are going to look at six figures if you are a specialist, five figures if you are a generalist. So, where is the question? What are you even thinking about? Why would you become a generalist with those two facts of life? Is that not part of it?

Dr. SCHROEDER. It is certainly part of it. But the issue of values, I think, is really central. There was a recent study that showed that a significantly larger proportion of college graduates who went into medicine really believe in altruism, and they believe in service. And making $100,000 is not terrible.

So, if the values could be stressed, and if it could be shown that you are not a chump for being a generalist, but this is really a valued career—I do not think it is only the dollars. If it were, I would really worry about the soul of medicine. I think that is part of it, but I do not think it is the only one.

Senator DASCHLE. I used the word stigma earlier, and I hope I am not over-using the term here. But the sense I have is that generalists have to explain that they can cut it when it comes to specialties, they just choose not to cut it.

I have been in pilot training from time to time, and I have seen a relationship between F–16 pilots and B–52 pilots. And God forbid I have any constituents who are B–52 pilots, because I am not giving them, perhaps, their due here. [Laughter.]

But the sense I have is that if you are a F–16 pilot, you have got it made. If you are an ophthalmologist or cardiologist, you have got it made.

If you are a primary physician, you have got a little explaining to do. Maybe you did not cut it in medical school; maybe you did not quite make the grade to get into that specialty. I guess I am exploring that because there is a mentality there that I wish we could really get into.

Dr. SCHROEDER. But things come and go. When I graduated from medical school in 1964 you could not get a graduate of a U.S. medical school to go into ENT. Now, that is the most highly-prized specialty. So, these things have their fads.

And it is not just the income, there is a down side to these specialties. They are quite limited, they can become routine. You do not see the variety. You often do not have the chance to have relationships with people on an ongoing basis. So, I think there are values in generalism.

But if you are right—and you might be right; we do not really know yet—then I think we need to say, OK, let us find someone else to do that generalist function. Because every country in the world needs a generalist function at the center of its health care system.

If the United States is such an idiosyncratic country that doctors will not become generalists, then I think we need to downsize the number of doctors, accept that they are all going to be specialists, and bring in someone else to do the generalist work. I suspect that medical schools could respond to that kind of a challenge.

Dr. LEE. There is also a little economic reality that is entering in—at least we see this in California—where the academic medical centers need patients, and they need tertiary care patients. In order to get tertiary care patients, they have to have primary care physicians.

So, as they get more into capitated systems, which is what is increasingly happening, they are looking aggressively for where they are going to find these generalist physicians, whether it is a General Internist, a Family Practitioner, or General Pediatrician.

And, they are saying, why did we train so much of our own competition? Because we have trained all of these cardiologists, and orthopedic surgeons who are now out there "taking our business away from us."

So, those realities, particularly the need for the primary care physician as the foundation for any network of care, is, I think, a fact that may influence the attitudes within a number of academic medical centers, and, particularly, I would say, in States like California where these kind of competitive systems are increasingly important.

Senator DASCHLE. Thank you both. Thank you, Mr. Chairman.

Senator ROCKEFELLER. Thank you, Senator Daschle. You know, I was just thinking. You were talking about role models. We both respect—everybody does—the skill of sub-specialties. But I just think back to the days that I lived in a town of 5,000 in West Virginia in a little community called Buckhannon. There was a family doctor there, Frank Hartman. He was a great friend of mine then, and still is. And he is both the case for, and the case against.

He was, to me, the ultimate role model, the person who was always on call. He would go to your house; he treated the local football team, the basketball team; he was the county coroner. You could just trust him with everything. I suppose he could write your will, if you wanted. He did it all. That was the up side.

The down side was that he just never stopped working. He just never stopped working. And every year he aged two, or does. And, so, one, it is an heroic model, and then, on the other hand, a troubling one because he has to work so hard. He has to put so much of himself into a community where it is very hard to get other doctors to come to. I just thought I would add that in.

Gentlemen, we have got a problem here, because at 5:00 o'clock we are having a full Finance Committee mark-up on other things. So, I am going to throw five rapid-fire questions at you, and please do not both answer each one. That is the only way I think I can manage you and the next panel, understanding that I, too, share Tom Daschle's gratitude, Dr. Schroeder, for Dr. Steve Ringel, who sits right behind me, and Rick Buccarelli, and others you have sent our way.

It is an extraordinary service for the U.S. Congress, because it means that a neurologist, in Dr. Ringel's case, is finding out about public policy, and he is contributing enormously to my knowledge of it. And I think it is a service to him because he is finding out how public policy works. I mean, it is just a great system, and I really do encourage you to continue it.

Dr. Lee, one of your commission's goals is to reduce the number of residency sub-specialty positions, as so stated. Now, the administration, as you have heard, has recommended modest changes in Medicare GME funding to hospitals to encourage physicians to go into primary care.

Now, the other end, the Council of Graduate Medical Education Group—hardly known in this country, but very powerful—wants to freeze medical school positions, reduce the number of residency positions, redistribute the remaining slots to assure that 50 percent go to primary care.

Now, should Medicare regulate the number of physicians trained in the United States? What are our options, and how do you assess them? And, obviously, Dr. Schroeder, you may add in, too.

Dr. LEE. Just a very quick answer to that, Senator. I think that we need to have a manpower policy, and, within that context, we

will see what is the role of the Federal Government, both in financing graduate medical education, and in the regulation of the total number and the distribution of residencies.

I think it should play a role. I think it pays a lot for the set of problems we now have, not only in the direct payments by Medicare, but in the consequences which Steve and others have mentioned.

Senator ROCKEFELLER. Who should be setting the national policy?

Dr. LEE. Well, I think the Federal Government should play a role in that. I do not think it should be exclusively a Federal role. But I am not against regulation, and I am not against the Federal Government exercising some limits on the number of residency programs that they would fund, or the positions they would fund, or the sites where those would be funded. And I would hope that there would be some redistribution.

I think that an independent commission might be the appropriate mechanism to do that rather than as we now do, simply through the Medicare payment. But that is something that needs to be examined within this context of a national policy.

Senator ROCKEFELLER. What are the advantages, and what are the disadvantages—and this is a new subject—of attaching all GME funding to Medicare Part B payments to physicians, and how disruptive would that be?

Dr. LEE. Well, I think it would be disruptive. I think it needs to be looked at, and we certainly will look at it. But we have not examined that question. I do not think that that is the best alternative, in terms of solving the financing problem.

You have got to come up with the money from some place, so does it come from Part A, or Part B? Part A is from a trust fund; Part B is from general revenues. Maybe you would rather do it from general revenues, over which there would be more control.

Senator ROCKEFELLER. Control.

Dr. LEE. So, that might be a better option. But, again, the commission has not looked at that in sufficient detail for me to make a really informed answer.

Senator ROCKEFELLER. Do you have any observation, Dr. Schroeder, on that? I mean, that does bring in more control.

Dr. SCHROEDER. Yes. I would just say, if you had to do it all over from scratch, you would not pay for training the way you are doing now. It just does not make sense. It is like hooking up health insurance with employment, it does not make any intuitive sense to do it that way.

Senator ROCKEFELLER. All right. Dr. Lee, in West Virginia, as I indicated earlier, we rely enormously on international medical graduates because they are the folks that ably serve in some of our most under-served medical areas. Will not more restrictive policies in which Medicare only pays for U.S. graduates only worsen and clearly worsen my situation in West Virginia, or in Minnesota?

Dr. LEE. It would, unless we had a policy that says we are going to redistribute the residencies. We are going to have more residencies in West Virginia if they can be appropriately based there in primary care or other fields, and we have a National Health Service Corps set of policies that provides incentives.

To me, that is a much more direct way to do it than to say that we are going to recruit graduates from medical schools that we have not approved because we cannot bite the bullet and have a national manpower policy.

Senator ROCKEFELLER. Well, in a sense, that is the way. You have to just end-run the system. I mean, while you are trying to adjust the system, on the one hand——

Dr. LEE. That is what you are doing. Yes.

Senator ROCKEFELLER [continuing]. Trying to figure out how medical schools and the people who run medical schools are going to make policies and inducements and set up programs that encourage primary care—now, we are not discouraging sub-specialties, but just encourage primary care—you have got to end-run it through the National Public Health and take it back up to 6,000; literally pump those people in on the assumption, in fact, proven out that 40 percent of them will probably end up staying where they were sent to serve, although they did not expect to do so in the first place.

Dr. LEE. Absolutely. And, if you provided a greater incentive once they were in practice. Steve mentioned, you have to change the conditions of practice. If you are going to continue a fee-for-service system, you have to enhance those practice incentives and opportunities for this physician of yours to have some continuing education and some relief from that seven-days-a-week, 365-day-a-year practice.

Senator ROCKEFELLER. Dr. Schroeder, obviously I am very interested in your new Generalist Physician Faculty Scholars program. Why has it been so difficult to develop faculty role models, as you have worked through your program in primary care?

Dr. SCHROEDER. Let's assume that you are running a school of medicine. You look at your income streams, and they come from patient care and research. Patient care dollars flow through the use of high technology. You can fund a technology-dependent specialist at 100 percent and have him work 30 percent in clinical work, generate his full salary, and free him up for other activities. You cannot cover the costs of a primary physician out of patient care.

Similarly, the research. The $9 billion a year that the NIH provides is almost all in high-tech science, and generalists, by and large, do not do that kind of science. So, it is very against the current funding streams for deans to be able to recruit generalists faculty, even if they want to do it.

Senator ROCKEFELLER. You know, we have not talked about it this afternoon, but the American public itself is infatuated with high technology and sub-specialties, are they not? In other words, they will often just figure that somebody in a sub-specialty is better educated, and, therefore, more informed to be helpful to them. I mean, is that not really part of our problem, too?

Dr. SCHROEDER. It is part of it. But it is interesting. In very sophisticated places like San Francisco and Boston, the major queuing is for a good, competent, general internist or family physician. they are the ones that are hardest to find.

Senator ROCKEFELLER. Well, then, explain what I am saying as opposed to what you are saying. Where is the balance?

Dr. SCHROEDER. Well, not voluntarily, not by design, we have evolved a system where all the incentives are to go into specialism, and part of it is that the profession has helped to play on the appetite the public has had for the technology.

But there has not been a planned process; we just kind of got there. If you look at individual areas, in fact, there is a market role for generalists, but we have stacked the deck against them.

Dr. LEE. We have also been telling the public that for at least the last 40 years.

Senator ROCKEFELLER. Exactly. Exactly.

Dr. LEE. From the academic medical centers, with their public relations operations. Every time there is a research advance, we talk about this research advance, even though it may be 10 years before it really reaches the patient. There is this expectation that is created that we have all this wonderful science that is going to produce all these cures.

And I think we have, in part, created that expectation, not only through the academic medical centers, but obviously through the industries that benefit from that—the pharmaceutical industry, the device industry, and others.

Senator ROCKEFELLER. Could I turn that around, then, Dr. Schroeder, to say, is there anything wrong with having, in fact, a high percentage of specialists if they can learn, in fact, to deliver frugal and more cost-effective health care?

Dr. SCHROEDER. In our current system, with the widespread diffusion of technology, the disproportionate payment for the use of that technology and the large number of specialists, we cannot have a cost-effective system. We will be up to 18 percent, 20 percent of GNP in the year 2000. It is just not going to work.

Senator ROCKEFELLER. A final question to you both. It would be my hope in this project that I want to work with at Dartmouth with Dr. Koop on getting 50 percent primary care, 50 percent subspecialty. I mean, it seems that that is the balance that ought to be in this country in the future. When will we get there? What year will we get there?

Dr. SCHROEDER. Well, you will not get there for a long time, because we are starting with a 30/70 ratio. What you need to look at are the choices of the graduates. And my guess is, if you have influenced the choice of the graduates by 8 or 10 years, if it is still going down or staying the same, we need to really look at down-sizing.

But if you just build a mathematical model, it will take a long time. If we went to 70/30 student generalist/specialist ratio, it would probably take 20–25 years before we got back to 50/50. So, it is going to take a long time because a doctor who graduates at 25 may practice for 40 or 45 more years.

Dr. LEE. I think in 1993, when Congress establishes a national health manpower policy, including a policy to both rationalize the financing of graduate medical education and the allocation of residency programs, that, by 1997, we will have in the residency stream, entering after the third year, 50 percent in primary care and 50 percent in specialties. It will then take over the next 20 years with that correction, but you have got to correct in that funnel in order to create the kind of change long-term that Steve has described.

Senator ROCKEFELLER. Your funnel will be working properly.

Dr. LEE. By 1997.

Senator ROCKEFELLER. Yes. Well, on that very high note, I thank both of you very much. I thank you for your patience in waiting, and also you, Dr. LeRoy.

Our last panel—and I apologize to them for keeping them waiting—consists of Dr. Robert Buchanan, who is chairman of the American Association of Medical Colleges, and general director of Massachusetts General; Dr. Michael Hodapp, whom Senator Durenberger introduced earlier, on behalf of the American Academy of Pediatrics and the American College of Physicians; Dr. Gerald Keller, vice president of the American Academy of Family Practice; and Dr. Donald Weston, vice chancellor for Health Sciences, University System of West Virginia.

I am very happy to welcome you gentlemen. Doctor Buchanan, I might start off with you, sir.

STATEMENT OF J. ROBERT BUCHANAN, M.D., CHAIRMAN, AMERICAN ASSOCIATION OF MEDICAL COLLEGES, AND GENERAL DIRECTOR, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MA

Dr. BUCHANAN. Thank you, Mr. Chairman. As the chairman has already said, I am Dr. Robert Buchanan, chairman of the Association of American Medical Colleges, and general director of the Massachusetts General Hospital in Boston. And I think that I should tell you that I am also formerly dean of Cornell University Medical College, from which Dr. Koop graduated before my tenure.

I would like very much to have my written testimony placed on the record.

Senator ROCKEFELLER. This is the case in all cases.

Dr. BUCHANAN. All right.

[The prepared statement of Dr. Buchanan appears in the appendix.]

Dr. BUCHANAN. As we have heard this afternoon, the data on the supply of generalist physicians are discouraging. However, I believe that changing the Medicare hospital payment system for graduate medical education or GME will have little, if any, impact on physician specialty distribution.

This afternoon, I will offer a proposal that may help ameliorate the shortage of generalist physicians. The AAMC recognizes and understands the problem. There is a substantial shortage of physicians in the generalist specialties of family medicine, general internal medicine, and general pediatrics. Unfortunately, unless we have effective interventions, improvement in the specialty distribution of physicians is not imminent.

U.S. medical school graduates are not entering generalist residency training programs in increasing numbers. Their failure to choose residencies in the generalist specialties is not based on the unavailability of residency slots. Only about one-half to two-thirds of first-year primary care track residency positions are filled by U.S. medical graduates through the matching program.

The percentage of graduating medical students planning certification in generalist specialties has declined from 34 percent in 1984, to about 14 percent in 1992. With the average debt of medi-

cal school graduates now over $56,000, some blame the downturn of interest in the generalist specialties on the need to enter specialties with higher earnings.

But reported data from medical school graduates show that there is no consistent relationship between their level of educational debt and their specialty choices. In choosing a specialty, medical students appear to be influenced by their educational experiences, such as a positive clerkship experience, and physician role models.

The AAMC recognizes the need for action. The association has established a generalist physician task force to design a series of strategies to promote and stimulate medical students' choice of careers in the generalist specialties.

Among the likely recommendations are: early and frequent exposure to primary care experiences during medical school; an elevation of the status of generalist physicians in academic medical centers, including recruitment of more generalist physician faculty.

Further improvement to the reimbursement scale for generalists would be a great assist in this effort. Equally helpful would be the retreat of third-party payors from the practice of medicine from remote sites.

The AAMC strongly supports more individuals entering generalist practice. However, proposals to change the current Medicare hospital payment system for the direct costs of GME will have little, if any, impact on the supply of generalist physicians.

Proposals to shift the generalist/specialist distribution by making differential payments based on specialty, and reduce the Medicare program's support of GME are misplaced. If anything, we believe these types of proposals threaten the stability of GME at a time when it is changing to adapt to a variety of environmental forces. There is no evidence that a medical student's specialty choice is related to Medicare payments to hospitals.

Aggregate national data show that the level of educational debt is not an overwhelming factor in influencing specialty choice. However, national averages mask the potential to influence specialty choice at the individual level.

The proposal I am making this afternoon would provide an incentive for the graduating medical student to select a career in a generalist specialty by reducing his or her debt service. The indebtedness problem of many students is characterized only partially by the total amount of debt at the time of graduation. A key variable in most loan programs is the frequency of interest capitalization.

Many important loans compound during residency training, making the total educational debt burden far more onerous when repayment actually begins. For example, the interest on HEL loans is often capitalized semi-annually between graduation and the start of repayment. The table that appears as Attachment B to my written testimony displays the substantial growth in principle that results from this practice.

It is in this arena that a significant contribution could be made by offering an incentive for medical school graduates to choose generalist careers. As stated earlier, national aggregate data on graduating student debt levels do not show a consistent relationship to specialty choice.

However, this proposal attempts to influence individual behaviors. Some students may respond to an incentive which offers some relief to their high debt burden and their prospects for future income generation.

The AAMC proposed a targeted program to subsidize the interest during the residency period for students with loans in excess of $30,000. The eligibility for this program would be restricted to students who choose the generalist specialties of Family Medicine, primary track General Internal Medicine, and primary care track General Pediatrics, as recognized by the National Resident Matching Program.

This proposal directs the incentive at the individual student, rather than the institution. It responds to the needs of those who are not going to be high earners by reducing the debt burden that accumulates during their residency years, and it requires a relatively small investment by the Federal Government to lower students' total educational debt.

The AAMC recognizes the methodological and policy-related difficulties of pursuing this option within the Medicare program. However, we believe this proposal is worthy of further study, including its total cost.

The AAMC would be pleased to work with the subcommittee to develop this proposal in greater detail. Strong residency programs require continuity of effort and stable support.

If the elderly and future generations of Americans are to have appropriate access to well-trained physicians, we must maintain and strengthen our medical education system, including its residency training component. Thank you, Mr. Chairman, for the opportunity to testify. I would be pleased to answer questions later.

Senator DURENBERGER. All right, Bob. Thank you very much. Michael Hodapp.

STATEMENT OF MICHAEL J. HODAPP, M.D., ON BEHALF OF THE AMERICAN ACADEMY OF PEDIATRICS AND THE AMERICAN COLLEGE OF PHYSICIANS, WILLMAR, MN

Dr. HODAPP. Mr. Chairman, members of the committee, I am Dr. Michael J. Hodapp, a pediatrician from Willmar, MN, and I am also a member of the American Academy of Pediatrics. I would like, initially, to say thank you for inviting us, and I feel honored and privileged to be here; a fairly exciting day, all told.

I am here today also representing the 43,000 members of the Academy, and also on behalf of the 76,000 physicians specializing in internal medicine that comprise the American College of Physicians.

During the past year, we have all been involved in the health care reform debate. We believe—and I know that you share our belief—that preventive care and primary care services are critical to any proposal designed to provide a healthier future for our Nation's citizens. This includes ensuring an adequate supply of all types of primary care physicians to meet the anticipated demand.

Primary care is pediatrics; it is internal medicine; and it is family medicine. All primary care physicians are broadly and extensively trained to efficiently deliver a full and continuous range of services, from preventive medicine, to comprehensive and consult-

ative patient care services. Primary care physicians are the most appropriate and economical providers of preventive health care.

Therefore, it is important to ensure that issues, such as education debt and low reimbursement for services, do not preclude medical students from choosing primary care specialties. A substantial improvement of the Resource-Based Relative Value Scale, the RBRVS, and the development of a Pediatric RBRVS will be significant determinants in whether the erosion of primary care specialties can be reversed.

In addition, steps should be taken to address the current geographic maldistribution of physicians and the under-representation of minorities in medicine. Currently, in our local area in our referral network—which includes a referral population of between 200,000 and 225,000 population base—we only have three pediatricians to provide comprehensive services. In a similarly sized larger metropolitan area, the ratio is about 1 to 7,000 to 8,000 people in a population base.

My testimony elaborates on several of these points, but, in the interest of time, I will focus on just a few issues. Training. Over the last several years, interest in primary care specialties has declined among U.S. medical students, and the fill rates for residency training slots are lower than they were 1985. The question which has been raised and talked about here is why students do not choose primary care.

The factors, which, again, have been talked about and identified as deterring students from entering primary care, include: perceptions of the stress level of the work and the relatively low earnings potential compared to other specialties; this, coupled with high medical school tuition and rising medical students' debt, is having a profound effect on medical career choices. Third, the lack of exposure to primary care during medical school and residency is also a significant barrier to choosing a career in primary care.

Again, I am going to bring this back to the real world. On a local level, we have participated with the University of Minnesota Department of Pediatrics, and we currently, over the last year, have voluntarily sponsored three second and third-year Pediatric residents to spend a month with us on our rural rotation. And, up to this point in time, it has been well-received and evaluated favorably, and we are planning to continue that in the coming year.

Some of the factors discouraging physicians from entering primary care can be addressed through the Medicare program. Others will need to be confronted within the context of long-term, comprehensive reform of the health care system.

On the issue of indebtedness, there are several short-term actions that could be taken to address educational debt, which would also remove the financial road blocks that exist for minorities to enter medicine.

We favor policies, such as restructuring student loan repayment schedules so that they are based on a percentage of earnings; loan forgiveness in return for service in under-served areas; and forbearance and deferment of low-interest loans for those entering primary care.

In terms of Medicare care GME, the future funding of graduate medical education will have serious implications for pediatrics and

internal medicine. Residency programs are largely funded by the allocation of patient-derived income, Medicare training funds, and Federal grants, and will need to receive a high level of Federal support.

On the selection of medical school applicants, we believe successful selection programs, medical schools must develop guidelines that will facilitate widespread implementation of the selection program, while maintaining the current high quality of medical students in primary care.

Furthermore, it is important that the initial interest in primary care be fostered throughout medical school careers. A program of communication and mentoring should be included to increase the exposure of medical students and residents to ambulatory care in community settings.

In terms of geographic distribution, meeting the needs of dispersed rural populations and urban inner city populations is especially challenging. There are a number of barriers, and/or disincentives that must be overcome to encourage the location of health professionals in under-served areas.

These include: (1) Inadequate reimbursement rates. (2) Federal regulations that do not take into account the realities of rural practice. (3) Lifestyle preferences, including social, cultural, and educational considerations. (4) The availability of medical resources, such as location of hospital facilities, access to continuing medical education, and the proximity of medical colleagues.

We support financial incentives to attract and to retain dedicated professionals to under-served areas. This should be a multi-faceted approach that considers issues such as expansion of the National Health Service Corps, other loan forgiveness programs, and a more favorable reimbursement.

In conclusion, this committee, by advocating for the health care needs of the Nation's people, must assume a leadership role in ensuring the production of more primary care physicians in the specialties of pediatrics, internal medicine, and family medicine.

To meet the demand for primary care services now and in the future, the medical profession, in tandem with the Federal Government, will need to be creative and aggressive, as well as united in purpose. Thank you.

Senator ROCKEFELLER. Thank you, Doctor, very much. I appreciate it very much. I apologize for my absence.

[The prepared statement of Dr. Hodapp appears in the appendix.]

Senator ROCKEFELLER. Dr. Keller.

STATEMENT OF GERALD C. KELLER, M.D., VICE PRESIDENT, AMERICAN ACADEMY OF FAMILY PRACTICE, MANDEVILLE, LA

Dr. KELLER. Good afternoon, Senator. I am Dr. Gerald Keller. I am vice president of the American Academy of Family Physicians. I am a practicing family physician in Mandeville, LA.

I, first, would like to talk about who generalist physicians are and what we do, because I have heard often this afternoon references to other specialists, as though generalists were not specialists.

Truly, we are specialists—specialists, board certified in family medicine, internal medicine, and general pediatrics. I am quite proud of being a specialist, having received my boards in 1970.

I guess you might say we provide that one-stop medical care—a term I really think sounds very commercial, but it does give the idea that we can treat 80–90 percent of those medical illnesses that are brought to us in our offices.

And not only do we treat the colds, and the flus, and the urinary tract infections, we also treat the diabetes, the hypertensives, as well as the heart disease. And I think generalists have proven in the past that we provide very good quality medical care in a very cost-efficient manner.

I think a very important part of our care is not only that it is comprehensive, but that we, as generalists, provide continuity of care. Knowing our patient and seeing them over and over again over many years, we know their past ills, we know their past feelings, and we can better treat them in a more efficient manner.

It comes to mind of a story of a patient I had some 3 months ago who was going to the ophthalmologist to get his cataracts removed, and, because he told him he was short of breath, was sent to a cardiologist.

After an extensive work-up, mounting in the hundreds or thousands of dollars, he was told that he had no heart or lung disease, and was not given a diagnosis for his shortness of breath. He was not satisfied. He came to me the next day. I knew his past history of diabetes, his past history of hypertension. I put him on diuretics, and he has been working in his outside garden ever since. These are the advantages to providing continuity of care by a generalist.

Perhaps most challenging, is to see the patient with that undiagnosed illness, a patient for whom we must plan the evaluation, do the physical, plan their care and manage their care, as well as direct them through the various consultants they might need in planning their care in the future.

But we must consider the shortage in generalist physicians if we are going to talk about any health care reform. Consider that if 37 or 38 million people suddenly had health care, there would be hundreds of people waiting outside my office, as well as other generalists offices to be seen, and we could not possibly see that number of people.

Subsequently, they would go to emergency rooms, they would see sub-specialists who were not trained to do the ambulatory care as we are, and this would all cause health care costs to rise. They would not have coordinated care, there could possibly be drug reactions occurring, and this would not be quality medical care in the American system.

Well, let us look at the big picture and what has caused this generalist shortage in the past. Certainly well-intentioned Federal laws and other health policies have inadvertently have helped to create, and still fuel this maldistribution. Less than 30 percent of our physicians are generalists, and of medical school graduates, now less than 25 percent are going into the generalist specialties.

Post World War II, we had the blossoming of biomedical research, which increased the focus of medical schools on sub-specialization. Unfortunately, this happened at the expense of general-

ist training. I am sure we have all heard of the statistics that medical students, when they enter school, over 50 percent say they want to go into the primary care specialties, yet less than 25 percent that graduate actually go into those specialties.

Why does this occur? Partly because many of the medical schools do not have Departments of Family Medicine; partly because of the sub-specialization in medical schools, medical students are taught by sub-specialists.

I can remember as far back as 1958, when I saw my advisor as a senior medical student, and told him that I wanted to go in general practice. He was aghast, and spent the next hour trying to talk me out of it because I was in the upper part of my class. That was an insult, as far as I was concerned, and it really affected the relationship with this gentleman, whom I certainly respected in every other manner.

Fifty-five percent of medical schools do not require family medicine clerkships, and, as we have said before, students are frequently told, you are too smart for primary care, or your kids can always swim in my pool.

Graduate medical education funding has been well-talked about this afternoon, and we know it favors the sub-specialist over the generalist; payments only going to hospitals and very little funding for ambulatory training, which is very, very important in practice today.

When I started in practice over 30 years ago, my partner and I, as only two physicians, had in the hospital, on an average, anywhere from 13 to 18 patients on a daily basis. There are now 5 people in my practice, and our average daily census is usually less than 10.

Ambulatory care is what we are practicing today, and what we need to train our physicians to do. There were $4.2 billion in Medicare GME payments last year to train sub-specialists, which are already in over supply.

The financial and quality of life issues have also been talked about, the prestige that the generalists feel they do not enjoy among their peers, the fact that they make less money.

Medical students read Medical Economics just like I do, and they see the surveys, just like I do. And they realize that generalists are paid less and have less prestige, work longer hours, have more hassle factors, fill out more insurance forms.

Health insurance coverage also favors sub-specialization. Many policies do not cover prevention. Many policies have high deductibles. Many policies have large co-insurance. These can pay as much as 20–30 percent of that primary care visit fee, but they pay 80 percent of changes for gastroscopies, colonoscopies, or stress tests.

What can we do? What can the Medicare Subcommittee do in its jurisdiction to balance this specialty differential? Well, first of all, we recommend that you reimburse out-patient residency training. We must reimburse ambulatory care; we must train more physicians who render ambulatory care; and we have got to reimburse physicians who are training in ambulatory care, whether that be in physicians' offices, whether that be in managed care systems, whether that be in community and migrant health centers.

Senator ROCKEFELLER. Dr. Keller, I have got to ask you to wind up, and I apologize.

Dr. KELLER. I am sorry that I have not been able to get into probably the main part of my testimony, which would be the other recommendations that we have made. But we do realize that we must change graduate medical education funding.

I think we have to change the resource-based relative value scale. We have to increase or accelerate the transition, eliminate the urban/rural differential, and Medicare must start covering prevention, as well as incorporate the concept of the personal physician being the entrance into the health care system. Thank you. And I am sorry to have run over.

Senator ROCKEFELLER. No. Thank you, Doctor, very much.

[The prepared statement of Dr. Keller appears in the appendix.]

Senator ROCKEFELLER. Dr. Weston, obviously I am grateful to see you, sir, from West Virginia.

STATEMENT OF W. DONALD WESTON, M.D., VICE CHANCELLOR FOR HEALTH SCIENCES, UNIVERSITY SYSTEMS OF WEST VIRGINIA, CHARLESTON, WV

Dr. WESTON. Mr. Chairman, it is my pleasure to be here to report on what I think reflects that if there is will of the political body of society to demand change, change can happen.

As you well know, about a year and a half ago, 2 years ago, there was great discomfort and concern about how responsible the health education programs—particularly the medical schools—were being to the people of West Virginia.

There were a series of task forces, some blood-letting, some attention-grabbing. But, ultimately, that process has ended up in something I would like to take a little bit of time to describe today, i.e., the health science programs and the medical schools collaborating or developing an educational program that, over the long haul, should start to address and meet the health care needs of West Virginia.

Number one, was that the medical schools and the health science centers were going to start to collaborate. The position I hold now was created to help bring about that coordination, and the message got through loud and clear. Though there is still some paranoia, I can assure you, they not only got the message, some of them are starting to get excited about the message.

At the same time, foundation funds became available for some initiatives in rural health education, primary care education, such as the Kellogg Foundation, which awarded money to West Virginia to change health professional education.

Governor Caperton and the legislature, seeing this beginning response, appropriated last October, in a special session, $6 million a year to implement a comprehensive health education program for the University System students in nursing, medicine, pharmacy, dentistry, nurse practitioners, physician assistants, and a new nurse midwife program. That is a big step in a short period of time.

The second piece that is really striking to me is the partnership with the communities. We were asked by the Legislature and by the Kellogg Foundation to create a minimum of six sites out of the

State dollars and five sites out of the Kellogg dollars for rural health education centers.

As of a month ago, we have now identified 14 sites that have brought together consortiums of not just primary care clinics, but rural hospitals, primary care clinics, health departments, behavioral health units, private practicing physicians, and there will be 14 networks/consortiums for rural health education across West Virginia.

There will be over 130 different units in that process. We have the dollars from the Foundation and from the State legislature to create learning education resource centers in each of those sites that network out.

You are familiar with the map, but I can assure you that 80 percent of the State is covered by these sites. We are beginning, now, to have students from all of the disciplines that will begin to go into a multi-disciplinary curriculum, which has been planned between nursing, medicine, pharmacy, dentistry.

It will be common, wherever possible, except for specific accreditation requirements by the discipline. All of the students will spend from three months, to a few selected students spending a full year in a rural site.

We have the dollars to hire field professors, which will be full-time, based in those communities in the disciplines, with appropriate academic links back to the university centers.

The last piece is the network and cooperation between the communities which have linked themselves together. And I am sure you know, I will be in Buckhannon tomorrow morning at St. Joe's, which is one of the sites.

It is bringing together, even in a rural, under-served area, the primary care clinic, with the rural hospital, with the health department, with an extra hospital down the road. They have brought themselves together.

We are not totally in control of what happens in these educational centers, it is a real partnership between these community networks and the three health science centers. We are just beginning to develop the educational program. We are just beginning. It is not a panacea.

But we are talking about creating an environment where there are role models, and a message from the State and the people that it is important for these students to be able to carry out a role that is responsive to the needs of the people. I think we have the beginnings of it in West Virginia.

Some of the issues, I would hope, could be changed at a national level. The State and Foundation have been the major forces in this so far. There is the issue of reimbursement of atypical sites for residency training. We have to jury-rig. We to use State funds, when it seems to me that it would be very appropriate for Federal residency funds to be made available for that purpose.

Too, I would believe that some sort of loan forgiveness program or health service corps would be helpful. And, lastly, I think ultimately you do have to have a national policy that deals with the distribution and mix of the reimbursement of graduate medical education. Thank you for the opportunity to testify.

[The prepared statement of Dr. Weston appears in the appendix.]

Senator ROCKEFELLER. A national manpower policy.

Dr. WESTON. Policy.

Senator ROCKEFELLER. Dr. Weston, let me begin with you. And I apologize to all four of you gentlemen because of the mark-up—a word which means nothing to anybody outside the Senate—begins at 5:00 o'clock. It means a lot to what appeared to be about 1,000 people lined up in the hall right outside. [Laughter.]

Dr. Weston, obviously, what you are doing and what we are doing in West Virginia is enormously exciting, to see three medical schools cooperating for the first time.

How do you monitor quality control? In other words, it is a dream to get the faculty and the students out to Camden-on-Gauley, out to Rainelle, and out to these rural places.

In hard-nosed terms, how do we monitor to be sure that quality is right, that the teaching is right, that the teachers are motivated, that they are not resisting being there, that the students are focused, and all of the rest of it?

Dr. WESTON. I happen to come from Michigan, where I was a dean and had a rural education program in the Upper Peninsula. You really have to use the same kind of outcome measures you would inside a university hospital.

You have to look at what the students do on external exams, what they do in patient care, you keep logs. We will have problem-solving exercises. You have the department linkages back.

We want to try to break down some of the barriers, but our students will have to meet the minimal standards of anyone else; we hope they will be better than that, they will gain from this process.

But you really have to monitor it. In a sense, I think the monitoring will be closer than what occasionally happens on a given ward, depending upon if who you are attending is in an academic medical center.

Senator ROCKEFELLER. Have you had a chance to notice any attitudinal bursts, changes, variations, in terms of students, and teaching faculty as a result of being in these rural areas?

Dr. WESTON. It is too soon for me to claim them being in the rural areas. I think I have seen some attitudinal changes that people, who initially were very skeptical and have gone out and been part of this planning, are starting to get excited. I think there are still some that say, hey, wait 2 years, and the pressure will go away.

Senator ROCKEFELLER. But the ones who are excited, what do they say? What do they talk about?

Dr. WESTON. Well, first of all, they start to get surprised by what is going on out there. They start to meet some people who are giving quality care. We have 70 primary care centers in the State, as you well know. But that is a mystery to a lot of people of what goes on there.

They start to find out the students that have gone out in selective experiences and find that they can practice. You have heard several witnesses testify today of the enormous amount of material, and how are they going to practice? Because these people want to be good physicians. They do not want to be half-baked physicians.

We can show them that you can practice quality medicine. We will have an information network in place that they can have ac-

cess to as much information on site in those rural settings as anyplace else in the State.

Senator ROCKEFELLER. And do you think that this experience is or will have an effect on those who run these medical schools, with respect to the importance of primary care in rural areas, and training?

Dr. WESTON. I think it will have a big effect, but I think it takes, also, the will of the Legislature, public policy people, to hold us accountable. Because you are not changing behavior magically. What you are starting to do is to reward a nucleus that kind of felt that way all along.

Just a small example. Probably one of the first times in American medicine the primary care doctors at the medical schools brought some new dollars in to the medical school beyond just primary care issues. I do not want to go into the details of that total $6 million package, but there was some help to some of the specialists.

That package was brought in by the primary care people, because they were starting to lead the way to respond to the needs of the people. I believe the change is real. I believe it will last, because the community is linked also. The community is a partner in this.

Senator ROCKEFELLER. I think it is a piece of magic which is going to work. It worked on me.

Dr. WESTON. Yes. But it is long-term. Also, it is the other health professions. West Virginia was more rural than I thought when I got there. [Laughter.]

I mean, those hollers, you drive a long way, and you have got small clusters of people. We have to have team care: nurse midwives, nurse practitioners, and primary care physicians. Linkages are going to be the total answer, and that is part of the beauty of getting all of those students together. They start to define those roles. But it will happen.

Senator ROCKEFELLER. Thank you, sir. Dr. Keller, your academy calls for increasing the number of generalists to 50 percent, and then the number of family practitioners to 25 percent. Could you sort of say how you arrived at that particular estimate?

Dr. KELLER. Well, we based the 50 percent on what is going on internationally. Most countries that have any type of universal health care have a majority of generalist physicians.

In fact, because most countries that have access to health care, universal-type policies, most of those generalist physicians are family physicians, or general physicians, in the sense that we consider, such as in Canada or in England.

We empirically pulled 25 percent, because we thought that was at least half of the 50 percent that we felt should be generalist. We felt that was the most we could aspire to at the present time because of the inability of training that many people over the next ten or 20 years.

We felt that family physicians were well-suited to primary care, because we do not have any age limit, because we treat our patients from the cradle to the grave.

[Additional information submitted follows:]

AMERICAN ACADEMY OF FAMILY PHYSICIANS,
Washington, DC, July 30, 1992.

Hon. JOHN D. ROCKEFELLER IV, *Chairman,*
Subcommittee on Medicare and Long Term Care,
Washington, D.C.

Dear Senator Rockefeller: Thank you again for inviting me to testify yesterday at the Subcommittee's hearing on physicians' specialty choices. I am writing this letter to offer some further elaboration on my response to one of your questions about the need for more generalists physicians. Your question asked about the Academy's position that 50 percent of U.S. physicians should be generalists, at least half of whom should be family physicians.

The Academy believes at least 25 percent of all physicians should be family physicians for the following reasons:

1. Family physicians offer the broadest scope of practice, from pediatrics to obstetrics to geriatrics. By contrast general pediatricians care for children and general internists frequently limit their practice to adult men.
2. Family physicians provide continuity of care not just for the whole patient, but for the whole family. For the significant proportion of Americans who want a doctor who knows and cares for all family members, family physicians offer a unique service.
3. Family practice has a low attrition rate. While 28 percent of graduates of pediatric residencies and 66 percent of internal medicine graduates ultimately limit their practice to a subspecialty, over 95 percent of family practice graduates are in active practice in this field.
4. Family physicians are the only specialists whose geographic distribution approximates that of the American population. Each year about 40 percent of new family physicians choose to practice in rural areas, with the other 60 percent dividing evenly between small cities, large cities, and suburban communities. This distribution has helped significantly to alleviate physician shortages in many underserved areas.
5. Finally family physicians have a strong record of responsiveness to community needs. Studies have shown family physicians are more willing than other specialists to hold convenient office hours, make house calls, see emergency patients and participate in community activities. Because the time constraints on yesterday's hearing did not permit this level of detail in my response, I respectfully request that this statement be included in the hearing record, preferably at the point where this question was asked and answered.

Sincerely,

GERALD C. KELLER, M.D., *Vice President*

Senator ROCKEFELLER. You recommended that every Medicare patient be under the care of a generalist and that we should charge a higher co-payment for two individuals who see a specialist without a generalist's approval.

Dr. KELLER. Correct.

Senator ROCKEFELLER. Now, obviously one can think of circumstances in which an individual's medical problem—he might have a heart arrythmia, you have to go see a cardiologist; some kind of seizure disorder, involving a neurologist. You are not making that a blanket policy.

Dr. KELLER. Our policy is not that he should pay more when he sees that sub-specialist, but only if he is self-referred and does not go through his personal physician. We feel that we can better guide to what specialist this patient should go.

Too often, we find patients go to the wrong specialist when they pick their own, only then to have to be referred to another specialist by that sub-specialist before he finds the right person. Should he see an orthopedist, or should he see a neurosurgeon?

We feel that, by coordinating that care, we can send him to the right physician at the right time if we are not able to care for him. So, we are not penalizing him for going to that sub-specialist, only if he does it on his own without direction from his personal physician.

Senator ROCKEFELLER. And the personal physician, in all cases, then, would have to make the referral to the specialist?

Dr. KELLER. Yes, sir, in all non-emergency cases. If you look at the managed care systems and how they are practicing today, and how they feel they can keep costs down, if you get into their medical system through that primary care physician who coordinates that care and then directs what specialty or sub-specialty whose services he can avail.

Senator ROCKEFELLER. Well, that is extremely interesting. It is a very commanding position. Very interesting.

Dr. KELLER. I think this is brought about and proven by the number of HMOs out there in managed care systems that are all fighting to get the family physicians, the general internists, and the pediatrician to work for them to be their point of entrance into their medical care.

Senator ROCKEFELLER. Senator Durenberger.

Senator DURENBERGER. I guess I had better decline questioning because of the time. C-SPAN is ready to do taxes, not medical education. So, I want to thank my friend, Michael Hodapp, from Willmar, for coming, and I want to thank all of you for being here. I have not seen Bob Buchanan in a long time. It is always a pleasure to see him.

I just want to end this with a couple of hard realities. One is a confession, and that is I have not learned anything here today that is going to help me solve this problem. I mean, I started out by talking about vision, leadership, and action, and I am frustrated.

I have learned a lot. I mean, I have picked up a lot of information. But I cannot say I know who ought to act in what area. And I guess that is the challenge for all of us, to continue to educate each other.

The second observation is that since we put the current system of Medicare payments for graduate medical education into place, nothing has changed. I have one feeling—not just out of this hearing, but over the process—something is going to have to change. But I do not know what it is, and that is the frustration.

Third, to say to those of you who are in the practice to take seriously what Dr. Koop said about values and the rest of that sort of thing. I think that exists out there.

I hear it all of the time from people who are the generalists, the family practitioners, and so forth. And they are not kidding me. I thought we were going to do something with RBRVS, and I do not think we have changed all that much.

I really do not think we have accomplished it. I think our hearts were in the right place, our minds were in the right place, but I doubt if we are changing the values in America.

The last thing I need to say, though, is the most important. And that is that we are going to do, in the next administration—whoever's it is—some framework for comprehensive health reform.

And I can tell you what is going to happen, even though I do not think it is the ideal way.

I think their side is going to say, there is only so much money to spend. And I am not attributing this to Jay. But if it is a national budget, or something like that, they are going to say, for some period of time, 14 percent is all we are going to spend. So, you are going to have to figure out how to change this.

If you want more family practitioners, you are going to have to take it out of the sub-specialties. There is not going to be any more, let us just do more forgiveness, let us do National Health Service Corps, let us do more of this, let us do more of that, to help build up these fellows out there in Willmar, and places like that.

It is going to have to come out of somebody else. And I guess what we are going to have to get help on is how to do that, because we need the specialized skills, and we need those caring, more generalized skilled.

And I hope that, as usual, the Chairman of this committee has challenged us just by laying the agenda out here so that we can deal with it, that we do not walk away and say, nothing is going to happen till next year, because something is going to happen next year.

And I think now is the time for those of you in your associations to help us prepare for that time. So, I thank you all for being here. Thank you, Mr. Chairman.

Senator ROCKEFELLER. As I do. Dr. Buchanan, I just have one quick one for you. And I mentioned this before, and, therefore, I have to be fair to you. Massachusetts General, which is respected on a world-wide basis, and I knew John Knowles, it is just an incredible place. But it does not appear to have a family practice residency.

Dr. BUCHANAN. It does not have a family practice residency. It does have a generalist track—a primary care track in general internal medicine. It was one of the pioneers in that area.

It has four neighborhood health centers. And it cares for the population as a primary care doctor for about a quarter of a million people through those neighborhood health centers.

So, I would like to say, yes, you are right. We do not have family practice, but we have had a very longstanding commitment to primary care, and Harvard medical students and MGH residents rotate through those sites.

Senator ROCKEFELLER. Well, that is fair of me to give you a chance to respond, and you have set the record straight.

Dr. BUCHANAN. Thank you for that.

Senator DURENBERGER. Mr. Chairman, if I might just put in the record.

Senator ROCKEFELLER. Yes.

Senator DURENBERGER. I have got a list. Cornell Medical School graduates 0.0 percent of graduates into family medical practice; Columbia, 0.7; NYU, 0.7; University of Chicago, 0.9; Johns Hopkins, 1.0; Harvard, 1.8; Yale, 2.9. What do all these people have in common? They do not have a Department of family medicine, they do not have a family medicine clerkship in them, and you keep going.

When you get down to Minnesota, California at Irvine, Mississippi, East Carolina, Medical College of Virginia, Southern Illi-

nois, Wright State, Marshall University and Mercer, that is where you are seeing the graduates come from. I will put this in the record to prove a point.

Senator ROCKEFELLER. It will be in the record.

[The list appears in the appendix.]

Senator ROCKEFELLER. And your response to that?

Dr. BUCHANAN. My response is that you will find that a lot of non-Harvard graduates who go through MGH end up in general Internal Medicine. We do not just train Harvard graduates at the MGH, we train people from all over the country, and, indeed, all over the globe.

Senator ROCKEFELLER. I hear you, Dr. Buchanan. I must say, though, that I am persuaded that there is a lot of——

Dr. BUCHANAN. I would not deny a correlation between the fact that institutions have family practices and the fact that more graduates tend to go into general practice roles.

Senator ROCKEFELLER. Yes. Well, we have work to do, gentlemen. I thank all of you very much. I apologize for your wait. The hearing is dismissed.

[Whereupon, at 4:50 p.m. the hearing was concluded.]

APPENDIX

Additional Material Submitted

Prepared Statement of J. Robert Buchanan

Mr. Chairman, members of the Committee, I am J. Robert Buchanan, M.D. chairman, Association of American Medical Colleges and general director, Massachusetts General Hospital. Prior to my current position, I have been president of the Michael Reese Hospital in Chicago, and dean of the Cornell University Medical College in New York City. I appreciate the opportunity to appear before you to discuss issues related to physician supply and Medicare payments for graduate medical education. The Association of American Medical Colleges (AAMC) represents all of the nation's 126 medical schools, 92 faculty societies, and over 300 major teaching hospitals that participate in the Medicare program. In federal fiscal year 1989, non-federal members of the AAMC's Council of Teaching Hospitals (COTH) accounted for nearly 2 million Medicare inpatient discharges.

This afternoon I am going to present some rather discouraging data on the current supply of physicians, particularly generalists, and some of the issues confronting today's medical students as they make their specialty choices. I will also point out why changing the Medicare hospital payment system for graduate medical education will have little, if any, impact on physician specialty distribution, and offer a constructive proposal that may help ameliorate the shortage of generalist physicians.

CURRENT PHYSICIAN SUPPLY

In 1990 the Physician Masterfile of the American Medical Association (AMA) listed 615,421 physicians in the U.S. This was about 32 percent more than the total number of physicians in the registry in 1980. In contrast, the U.S. population grew only 9 percent during the same period. The total number of physicians per 100,000 population was 202 in 1980. By 1990 the physician-to-population ratio was 244.

In reviewing physician manpower growth rates, however, one finds that some specialties have grown much faster than others. Table 1 shows the growth rates of selected specialties between 1980 and 1990. Emergency medicine (a relatively new specialty), diagnostic radiology, radiation oncology, anesthesiology, and two internal medicine subspecialties—gastroenterology and pulmonary diseases—have had much higher than average growth rates. Despite a small increase over the past decade, the total number of physicians in family and general practice is no greater now than 25 years ago. Also, those specialties that have a public health emphasis, such as public health and preventive medicine, are not very popular with our students and hence the number of practitioners in these specialties is virtually constant and is not increasing.

Table 1—PHYSICIAN MANPOWER GROWTH RATES BY SELECTED SPECIALTY 1980–1990

[In percent]

Specialty	Growth rate
Emergency Medicine [1]	150
Diagnostic Radiology	118
Gastroenterology	85
Radiation Oncology	78
Pulmonary Diseases	64

Table 1—PHYSICIAN MANPOWER GROWTH RATES BY SELECTED SPECIALTY 1980–1990—Continued

[In percent]

Specialty	Growth rate
Anesthesiology	63
Cardiolvascular Diseases	61
Pediatrics	42
Internal Medicine	40
Orthopedic Surgery	37
All Physicians (National Average)	32
General Preventive Medicine	28
Obstetrics/Gynecology	28
Psychiatry	28
Ophthalmology	24
Otolaryngology	24
Pathology	21
Family Practice/General Practice	17
General Surgery	13

[1] Emergency medicine is a relatively new specialty.

Source: AAMC calculations of American Medical Association data, 1992.

While many believe that there is an oversupply of physicians, there is also recognition of a substantial shortage of physicians in the generalist medical specialties. These specialties, which are called generalist specialties throughout this testimony, are family practice, general internal medicine and general pediatrics. The conventional wisdom holds that 50 percent of practicing physicians ought to be generalists, but data from the AMA in Table 2 show that the percentage of generalists is significantly below the 50 percent target. Of slightly over 600,000 total physicians, about 32 percent of the total physician pool is represented by generalists. Even if one adjusts the total pool for those physicians in active practice, the percentage of generalists is improved only to 37 percent.

Table 2.—ESTIMATED NUMBER OF GENERALIST PHYSICIANS AND AS A PERCENTAGE OF ALL PHYSICIANS, 1990

	1990
Total Physicians	615,421
Family/General Practice	70,480
General Internal Medicine (estimated)	76,295
General Pediatrics	36,519
Total Generalists without Obstetrics/Gynecology	183,294
Obstetrics/Gynecology Generalists (estimated)	16,848
Total Generalists	200,142
Generalists as a Percentage of Total Physicians	32%
Generalists us a Percentage of Active Total Physicians	37%

Source: AAMC calculations of American Medical Association data, 1992.

There is some imprecision in the estimates shown in Table 2 because of the difficulty in classifying physicians in generalist/primary care practice. For example, about 98,000 physicians are listed in the AMA database as internists, but this includes the specialties that the AMA does not list separately—endocrinology, infectious disease, hematology and oncology, nephrology, and rheumatic disease. At least 22,000 individuals have been certified in these specialties and therefore have been removed from the generalist pool in Table 2. Additionally, some individuals count obstetrics and gynecology as a primary care specialty and others do not. For purposes of this analysis, the assumption is that one-half of the obstetricians/gynecologists are also primary care physicians for women. After these adjustments, generalist physicians constitute at best only slightly more than one-third of all active physicians.

GRADUATES' INTEREST IN GENERALIST SPECIALTIES

The answer to the problem is clear: we need to have more of our medical school graduates select one of the generalist specialties. Unfortunately, the trend is not encouraging. U.S. medical school graduates are not entering residency training programs in the generalist specialties in increasing numbers. Table 3 shows that in the last seven years, there has been a significant downturn in the number of graduates entering family practice and internal medicine residencies. Since 1986 there has been a 28.6 percent reduction in the number of seniors choosing family practice programs through the National Resident Matching Program (NRMP), and a 26 percent decline in the internal medicine residency match.

Table 3.—NUMBER OF FIRST-YEAR RESIDENCY POSITIONS FILLED BY GRADUATES OF U.S. MEDICAL SCHOOLS, 1986–1992

	1986	1988	1990	1992
Family Practice	1,960	1,767	1,685	1,398
Internal Medicine [1]	5,985	6,060	5,906	4,429
Pediatrics [1]	1,723	1,659	1,669	1,325

[1] All positions, including general primary care tracks.

Source: National Resident Matching Program, 1992.

Medical students' failure to choose residency training programs in the generalist specialties is not based on the unavailability of residency slots in these specialties. Data from the 1992 NRMP "match" show many generalist residency positions are unfilled after U.S. medical school graduates choose their residencies. In 1992:

- 66 percent of the first-year residency positions offered in "primary care" internal medicine were filled by graduates of U.S. medical schools. Counting graduates of foreign medical schools, the percentage of filled positions was 87 percent.
- 52 percent of the first-year residency positions offered in "primary care" pediatrics were filled by U.S. graduates. When foreign medical school graduates are included,the percentage of filled positions was 74 percent.
- 56 percent of the first-year residency positions in family practice were filled by U.S. Graduates. When graduates of foreign medical schools are included, the percentage of filled positions was 68 percent.

If the objective is to produce more generalist physicians, then the issue is how to encourage medical students to select generalist residency positions. Unfortunately, the trend is in the opposite direction. Table 4 shows the percentage of graduating medical students planning certification in generalist specialties—family practice, general internal medicine, and general pediatrics—has declined from 34 percent in 1984 to around 14 percent in 1992.

Table 4.—PERCENTAGE OF GRADUATING SENIORS PLANNING CERTIFICATION IN GENERALIST SPECIALTIES, 1984 and 1992

	1984	1992
Family Practice	17.0%	8.1%
General Internal Medicine	10.4	3.1
General Pediatrics	6.6	3.0
Total	34.0%	14.2%

Source: AAMC Graduation Questionnaire, 1992.

What accounts for the downturn of interest in these generalist medical specialties? What are the factors that influence graduating seniors in choosing their specialties? As with any career choice, the decision is the product of a number of variables.

THE ROLE OF DEBT IN SPECIALTY CHOICE

With accumulated educational debt climbing between 7 to 10 percent each year, and now averaging over $56,000 for graduating medical school seniors, it is tempting to blame shifting career interest on the need to enter specialties with higher earnings. Arguably, a graduate with a $75,000 debt might be more attracted to sur-

gical specialties with mean net incomes over $200,000, rather than family practice where average net incomes are barely $100,000.

However, AAMC data shown in Table 5 indicate that there is no consistent relationship between the level of debt and students' decisions about specialty choice.

Table 5.—INDEBTEDNESS OF 1992 MEDICAL SCHOOL GRADUATES BY SPECIALTY CERTIFICATION PLANS

	Specialty certification choice	Number	Mean debt	Percent with no debt ≥ $50,000
Anesthesiology	340	$59,650	18.6	46.5
Dermatology	96	56,848	21.1	41.1
Emergency Medicine	364	59,252	11.9	47.8
Family Practice	661	54,208	15.5	42.5
General Internal Medicine	1,232	56,553	14.3	45.6
Internal Medicine Subspecialties	1,232	56,654	22.3	41.9
Neurology	144	58,741	23.8	43.4
Obstetrics/Gynecology	203	57,680	13.9	52.2
Obstetrics/Gynecology Subspecialties	296	58,363	18.7	45.3
Ophthalmology	206	53,049	21.1	38.2
Pathology	25	45,397	24.0	28.0
Pathology Subspecialties	127	52,987	17.5	41.3
General Pediatrics	185	56,320	14.8	42.9
Pediatric Subspecialties	399	52,321	16.5	43.0
Physical Medicine & Rehabilitation	124	55,307	19.5	39.8
Psychiatry	119	59,197	15.1	51.3
Psychiatry Subspecialties	188	55,555	21.2	42.9
Radioloy	43	53,922	14.3	40.5
Radiology Subspecialties	509	52,998	24.6	35.5
General Surgery	152	61,789	28.3	44.7
Surgical Subspecialties	265	59,226	20.5	46.7
Neurological Surgery	56	54,621	21.8	47.3
Orthopedic Surgery	239	56,536	21.2	41.9
Otolaryncology	148	52,922	23.1	37.4
Thoracic Surgery	148	58,700	28.3	47.2
Urology	119	56,335	26.5	36.8
Subtotal, respondents who had chosen a specialty, and had decided whethr or not to subspecialize	6,534	56,175	19.3	42.4
All Respondents [1]	11,147	56,051	19.7	42.6

[1] Includes 4,613 respondents who had not decided yet on a specialty, or who had decided on a specialty but had not decided whether to subspecialize, or who had chosen a specialty not listed above (unlisted specialties have very small numbers of respondents).

Source: AAMC Graduation Questionnaire, 1992.

Specialty choice may not be so much influenced by the level of indebtedness as by income anticipation. The elitism, prestige, and money that accrue to the subspecialties undoubtedly influence career choice. There are also different expectations in lifestyle among young people. They simply wish more time for family, significant others, hobbies, and recreation than was the case in my generation. There are some specialties that are more protective of lifestyle interests than the generalist specialties. It may be also that changes in medical care organization and delivery of services will offer better lifestyle opportunities for young physicians who choose general practice as these physicians become more willing to be employed by group practices or certain types of managed care arrangements.

OTHER FACTORS INFLUENCING SPECIALTY CHOICE

The AAMC has invested significant effort to learn as much as possible about medical student specialty choice. Every year the Association asks students in the winter of their senior year about the factors influencing their specialty choices. Graduating seniors consistently downplay the influence of expected income. Table 6 shows how graduating medical students rank the influence of various factors influencing specialty choice.

Table 6.—RANKING OF FACTORS INFLUENCING SPECIALTY CHOICE OF 1991 GRADUATING MEDICAL STUDENTS

	4-point scale: 1 = minor positive influence to 4 = major positive influence
Clerkships in the area	3.2
Consistency with personality	3.0
Like type of patients	2.9
Physician role model	2.8
Challenging problems	2.8
Intellectual content	2.8
Type of patient problems	2.8
Special skills and talent	2.8
Courses in the area	2.4
Not too demanding time/effort	1.7
Income	1.7
Minimum of uncertainty	1.7
Length of residency	1.7
Level of educational debt	1.7
Lack of stress	1.7
Prestige within profession	1.6

Source: AAMC Graduation Questionnaire, 1991.

Despite some overlap in these variables, one can draw some conclusions about the factors that affect medical students' specialty choice. These results—and they do not change materially from year to year—tell us that medical students are influenced by their educational experiences. These include positive clerkship experiences and physician role models. Students also pick a specialty that interests and challenges them and that is consistent with their personality.

Notwithstanding these data, in a May 28, 1992 article in the **New England Journal of Medicine** on primary care medicine in Canada, Drs. Michael Whitcomb and J.P. Desgroseilliers state:

> A number of specific issues related to primary care medicine must be addressed if the supply of primary care physicians in the United States is to increase. We believe that the lack of prestige associated with this specialty and the unfavorable economics of primary care practice are the most important factors (p. 1471).

Academic medicine has taken steps to increase the visibility of family medicine. Of the nation's 126 accredited medical schools, 103, or 82 percent, have departments of family medicine. In addition, 72 medical schools (57 percent) have required family medicine clerkships in either the third or fourth year. A recent analysis by AAMC staff showed that, on average, 15.6 percent of graduates of medical schools with required third-year clerkships in family medicine planned residencies in family practice, whereas only 6.9 percent of graduates of schools without that requirement did so. To the extent that the requirement is expanded beyond the 57 percent of medical schools at the current time, the interest in family medicine careers ought to increase.

The Liaison Committee on Medical Education (LCME), the body that accredits U.S. medical schools, is preparing an amendment to its accreditation standards to increase the emphasis on clinical education in ambulatory care settings and to include training in the generalist specialties of family medicine, general internal medicine, and pediatrics. The AAMC, as a sponsoring organization of the LCME, supports this amendment.

Recognizing the need for action, the AAMC has established a generalist physician task force to design a series of strategies to promote medical students' choice of generalist specialties. While the task force has not yet submitted its final report to the AAMC governance, its recommendations for raising the interest of medical students in generalist specialties most likely will include:

- more attention to the selection of students who have indicated an early interest in primary care;
- identification and recruitment of more generalist physicians as faculty;
- early and frequent exposure to primary care experiences during medical school;
- addition of more ambulatory settings for educational experiences;

- development of an educational paradigm for the ambulatory setting to include components such as clinical epidemiology, biopsychosocial medicine, problems of outpatient medical practice, skills in medical informatics, and the ability to interface with other specialties;
- redressing the imbalance in reimbursement for services provided by generalist and specialist physicians; and
- elevation of the status of the generalist physician in academic medical centers.

In September the Association will present for approval of its governing body a policy statement and several specific implementation strategies targeted at the academic medical community. The AAMC will continue to assist all of its members in a concerted effort to promote interest in the generalist specialties.

Financing Graduate Medical Education

We may all agree that the shortage of generalist physicians is unacceptable to society. Some policymakers and others have argued that the Federal Government—particularly the Medicare program—should take a more active role in ameliorating the generalist physician shortage by changing the way that graduate medical education (GME) is financed. The AAMC is not convinced that changing Medicare hospital payments for graduate medical education will have a positive effect on the decisions senior medical students make with respect to specialty choice. Before proceeding directly to the debate on this issue, I will provide some background on graduate medical education and its current method of financing.

THE ENVIRONMENT FOR GRADUATE MEDICAL EDUCATION

The nature of graduate medical education is changing. Many factors in the current environment are contributing to changes in how graduate medical education is conducted and how it may be financed in the future. Residency and fellowship education is a system of learning by participation in the care of individual patients and, therefore, includes elements of both education and service. However, as hospitals are increasingly pressured to improve efficiency, residency programs are under constant pressure to emphasize service over their educational role. While graduate medical education is organized primarily in hospitals and has been focused mainly on inpatients, its involvement with ambulatory patients is increasing. As hospital's encourage shorter stays by more acutely ill patients, training in ambulatory and long-term care settings is needed to supplement the educational experience provided in hospitals to assure that residents receive comprehensive clinical training.

Residency programs require long-term, stable funding commitments to provide an appropriate education and to enhance the quality of patient services. Graduate medical education has been funded primarily by patient service revenues to hospitals, with significant appropriations supporting some municipal- and state-supported hospitals and all military and Veterans Administration (VA) hospitals. AAMC data show that, on average, hospital patient revenues supported 79 percent of resident stipends and benefits and 64 percent of clinical fellow stipends and benefits, excluding VA hospitals, in 1991-92 (Chart A). If anything, these data overstate the role of the hospital in financing graduate medical education, particularly for subspecialty clinical fellows, who are often not funded by the hospital, and therefore may not be included in the institution's records.

Faced with pressure to restrain health care expenditures, public and private third-party payers are adopting payment systems that limit or even decline to provide payments for graduate medical education costs. The costs associated with the training of physicians may not be recognized by payers as they shift to fixed price systems for defined "bundles" or packages of services, capitated payments, and negotiated contracts for selected services.

THE MEDICARE PROGRAM'S ROLE IN GRADUATE MEDICAL EDUCATION FINANCING

To provide experientially-based clinical training for physicians, dentists, nurses, and allied health professionals, hospitals incur educational costs related to patient care. For graduate medical education, these added costs include resident stipends and benefits, salaries and benefits for faculty who supervise residents in the care of patients, classroom space, supplies, clerical support, and allocated overhead. The Medicare program makes an explicit payment to teaching hospitals for its share of allowable direct GME costs and a payment for its share of other health professions education costs. The direct GME payment is separate from, and should not be confused with, the purpose or methodology of the indirect medical education (IME) adjustment in the prospective payment system. Historically, Medicare has shared in the direct costs of approved education activities on a reasonable cost basis.

The passage of the Consolidated Omnibus Budget Reconciliation Act (COBRA) (P.L. 99–272) in 1986 changed the method of payment for direct GME costs and placed limitations on Medicare reimbursement for physicians in graduate medical training (residents). COBRA replaced a cost pass-through methodology with a prospective amount for each resident. The calculation of a hospital-specific per resident amount is based on the 1984 or 1985 cost reporting year (called the base year per resident amount) and is updated annually by an inflation factor. Bach hospital's per resident amount is determined by dividing its allowable base year costs by the number of full-time equivalent (FTE) interns and residents at the hospital during that base year. The per resident amount is then updated for inflation and multiplied by the number of FTE interns and residents in the hospital complex during the payment period. Residents are weighted at 1.0 FTE for the residency period required for initial board certification plus one year, not to exceed a total of five years. Beyond the lesser of these two limits, residents who remain in approved programs are to be weighted at 0.5 FTEs. Medicare's share of the aggregate payment amount is based on the ratio of Medicare inpatient days to total inpatient days.

This change in payment methodology, which the AAMC did not oppose, terminated the Medicare program's previous open-ended commitment to financing graduate medical education. Although COBRA limits direct GME payments, it still acknowledges the historical scope of direct medical education costs, including the salaries and fringe benefits of residents and supervising faculty physicians and institutional overhead costs.

FEDERAL PROPOSALS TO CHANGE MEDICARE PAYMENTS FOR DIRECT GME COSTS

For several years the Administration has proposed changes in Medicare payment for GME costs that would reduce the Medicare program's role in GME funding. In a 1990 report to Congress, the Department of Health and Human Services (DHHS) recommended that per resident amounts be based on "the national mean of residents' salaries, plus an overhead factor reflecting a portion of administrative costs allocated to GME." The overhead factor could be weighted depending on the resident's specialty (primary care or non-primary care) or length of the training period.

The Administration's comprehensive health reform program, released on February 6, 1992, states that "GME payments should be reshaped to help ensure . . . primary care physicians," and that "teaching hospitals should be encouraged through payment policy to shift the primary care/specialist training mix," but it does not outline a specific proposal. The proposal in the Administration's FY 1992 budget document is similar to the 1990 DHHS recommendation and to its FY 1991 proposal:

> Base graduate medical education payments on the national average salary of residents. Pay 240 percent of this figure for primary care residents, 140 percent for non-primary care residents in their initial residency period, and 100 percent for non-primary care residents beyond this period.

If adopted, this proposal would replace the current payment method based on hospital-specific costs with a system based on one national rate adjusted by specialty and length of training. Thus, a hospital's total direct GME payment would be based not on its costs, but on the specialty mix of its trainees. The Administration believes this proposal provides incentives to produce more generalist physicians. The proposal would accomplish this by paying relatively favorable amounts for primary care residencies, and substantially less favorable payment amounts for all other residencies. The Administration's proposal does not define- primary care residency programs and it does not indicate the national average resident's salary.

Increasing the supply of primary care physicians is also a goal of the Stark/Gephardt Health Care Reform Bill (H.R. 5502). Like the Administration's plan, this proposal would weight the count of full-time residents to emphasize support for primary care physicians. Bach resident in a primary care residency program, including general practice, family practice, general internal medicine and general pediatrics, would be counted as 1.1 FTE residents. The weights assigned to other types of residents would vary by specialty and length of training. For example, each resident in the first three years of non-primary care specialties or "other" (non-primary care) internal medicine or pediatrics would be counted as .9 FTE. The lowest weight of 0.5 would be assigned to full-time residents beyond the initial residency period.

To estimate the impact of the Administration's proposal on AAMC membership, we assume that the national average resident's salary is $30,191. This was the 1991–92 (FY 1992) average salary/stipend for the 3rd post-MD year based on the AAMC Council of Teaching Hospitals (COTH) Survey of Housestaff Stipends, Benefits and Funding, 1991. Three differential weighting percentages are then applied to this amount ($30,191) depending on the resident's specialty:

- primary care residents would be weighted at 240 percent of the national average resident salary.
  $30,191 X 240% = $72,458
- non-primary care residents in their initial residency period would be weighted at 140 percent.
  $30,191 X 140% = $42,267
- non-primary care residents beyond the initial residency period would be weighted at 100 percent.
  $30,191 X 100% = $30,191

Medicare's share of the aggregate payment amount is then based on the hospital's ratio of Medicare inpatient days to total inpatient days. Unlike the current payment method, this proposal would not recognize the scope of direct GME costs for trainees in all specialties.

This proposal would have a negative effect on most hospitals' Medicare payments for direct GME costs, depending on the hospital's specialty mix of resident trainees. According to data on the audited and updated per resident payment amounts provided by the Health Care Financing Administration (HCFA) and calculated by the AAMC, the median per resident amount in 1991 was $48,804 (based on 1,214 providers). Under the Administration's proposal, the Medicare program would pay significantly lower per resident amounts for non-primary care residents beyond the initial residency period ($30,191 in 1992) and for non-primary care residents in their initial residency period ($42,267).

AAMC POSITION AND REASONS FOR OPPOSITION

Although the AAMC strongly supports more individuals entering generalist practice, the Association opposes proposals that intend to stimulate the production of generalist physicians by changing the current Medicare payment system for direct GME costs. There is no evidence that a medical student's specialty choice is related to Medicare payments to hospitals.

The AAMC believes that all third-party payers, including Medicare, must support their proportionate share of the costs of supervision and other related educational costs for all residents to help ensure high quality patient care, and to preserve the high quality of residency programs. Graduate medical education is based on the premise that residents learn best by participating, under supervision, in the day-to-day care of patients. Supervising physicians must judge the clinical capabilities of residents, provide residents with the opportunities to exercise progressively greater independence, and ensure that the care of patients is not compromised. Recent public and media attention to the issues of residents' supervision and working hours has led to state governmental as well as voluntary accreditation efforts to set more explicit requirements for supervision and to restrict residents' working hours. This supervising responsibility requires substantial time and commitment, and must be paid for.

It is important to understand the internal institutional dynamics that will result from the implementation of preferential weighting proposals. Those disciplines with an increased weighting factor will argue that they deserve "more" of the direct GME funds for their residency programs. At the same time, other disciplines, as a result of reductions in fee revenue attributable to the implementation of the resource-based relative value scale, are increasing pressure for more faculty salary support. Implementation of the new Medicare physician payment system began in January. Reports from members of the AAMC's Council of Teaching Hospitals indicate some specialty departments are approaching hospital executives for additional academic supervisory and administrative financial support.

Hospitals have not experienced fully the impact of the change in Medicare direct GME payments legislated by COBRA. This legislation represented a major change in Medicare payment policy from an open ended system to a prospective, capitated amount. Implementing regulations were not issued until September 1989, and audits are not complete. Some hospitals have yet to be paid under this "new" system.

While supporters of preferential weighting proposals indicate that a higher payment differential will be enacted only for primary care disciplines, it is likely many clinical specialties will argue they also deserve a "special weighting factor." The AAMC notes that emergency medicine was added as a primary care category to the House Ways and Means Committee proposal two years ago, and physical medicine and child psychiatry immediately made a case for inclusion because these specialties are in short supply.

The AAMC strongly supports more individuals entering generalist practice, but as the data-from medical school graduates demonstrate, medical students' selection of residency training programs is not affected by Medicare payments to hospitals. As

shown in Table 6, a variety of personal factors influence specialty choice. Hence, personal incentives such as loan forgiveness, tax benefits, and other inducements are more likely to result in greater numbers of U.S. medical school graduates entering the generalist disciplines. If monetary incentives are to be provided, they should be aimed at individuals, not hospitals and their sponsored residency programs. There are already a variety of federally-sponsored student loan repayment programs. Attachment A to this testimony provides a brief description of these programs.

A PROPOSAL TO ENCOURAGE CAREER CHOICES IN THE GENERALIST SPECIALTIES

While aggregate average data do not reveal a relationship between medical student debt and specialty choice, the potential to influence generalist specialty choice exists at the individual level. Given the generalist physician's expectation of a relatively lower income, our proposal would reduce the generalist's debt service and provide an incentive for the graduating medical student to choose a career in the generalist specialties.

Medical students borrow from a number of loan programs. These programs range from the Stafford student loans authorized by the Higher Education Act, which are considered to be the most attractive federal loans, to the Health Education Assistance Loans (HEAL) authorized by the Public Health Service Act. Most observers agree that HEAL loans are much less attractive to the borrower than others. There is substantial variation in the insurance fee, interest rate, interest subsidy, interest capitalization features, deferment options, and annual loan limits for the variety of available loans.

The most attractive Stafford loans have had a $7,500 annual borrowing limit and a total borrowing limit of $54,750. Thus, an eligible student could borrow up to $30,000 over four years, even if that student started medical school with $24,750 in debt from undergraduate Stafford loans. These loans are particularly attractive because the interest is subsidized by the Federal Government while a student is in school (including undergraduate school) and through the first two and one-half years of the residency program.

A key variable in all other loans is the frequency of interest capitalization. For example, the interest on HEAL loans is often capitalized semi-annually between graduation and the start of repayment. Thus, a student's total amount of educational debt upon graduation from medical school is an incomplete description of the problem. The compounding feature of many loans makes the total educational debt burden far more onerous at the time repayment begins. The table that appears as Attachment B to this testimony displays the substantial growth in principal that results from this practice.

The AAMC believes the Finance Committee could make a substantial contribution in this arena by offering an incentive for medical school graduates to choose careers in the generalist specialties and, at the same time, dealing with the problem of medical student debt. As stated earlier, the data on graduating medical student debt levels do not show a consistent relationship to specialty choice. But aggregate "average" student debt data mask individual student circumstances and the potential to influence individual behavior. Some students may respond to an incentive which offers some relief to their high debt burden.

The AAMC believes a targeted program to subsidize the interest during the residency period for students with loans in excess of $30,000 would be a constructive approach. The eligibility for this program would be restricted to students who choose the generalist specialties of family medicine, "primary care track" general internal medicine and "primary track" general pediatrics as recognized by the National Resident Matching Program. We recognize that such a proposal may appear modest. However, it

- directs the incentive at the individual student, rather than the institution;
- responds to the needs of those who are not going to be "high earners" by reducing the debt burden that accumulates during their residency program; and
- requires a relatively small investment by the Federal Government to lower a student's total educational debt.

Attachment B to this testimony provides an example of how a subsidy would affect the principal and the repayment schedule for an individual.

The AAMC recognizes the methodological and policy-related difficulties of pursuing this option within the Medicare program. However, we believe this proposal is worthy of further study, including its cost, and would be pleased to work with staff of the Finance Committee to develop this proposal in greater detail.

CONCLUSION

Changes in physician manpower supply, pressure from both federal and private payers to constrain the growth in health care expenditures, and changes in medical care delivery have produced significant tensions for residency and fellowship training programs. Concurrently, the Association recognizes the frustration of government policy makers in assuring the public has access to generalist physician services. The AAMC supports strategies to develop additional generalist physician manpower, but as I have attempted to demonstrate, proposals to alter yet again Medicare payments to hospitals for graduate medical education will only contribute to instability, and will be detrimental to the nation's medical education system. Strong residency programs require continuity of effort and stable support. If future generations of Americans are to have appropriate access to well-trained physicians, we must maintain and strengthen our medical education system, including its residency training component.

Mr. Chairman, thank you for the opportunity to testify and I am pleased to answer any of the Committee's questions.

Attachments.

Attachment A

Federal Student Loan Repayment Programs

National Health Service Corps: The National Health Service Corps (NHSC) was established to assist in the recruitment of primary care health professionals for service in health professional shortage areas (HPSAs). In exchange for service, the program awards scholarships to students and enters into loan repayment agreements. The NHSC also awards grants to states for the purpose of supporting state loan repayment programs.

To be eligible to participate in the loan repayment program, an individual must have a degree in allopathic or osteopathic medicine, dentistry, or another health profession needed by the NHSC, be enrolled in an approved graduate training program in the health professions, or be enrolled full-time in the final year of a course of study leading to a health professions degree at an accredited school. Applicants must also agree to serve for a minimum of two years. Priority is given to applicants whose health profession or specialty is most needed by the NHSC and who have characteristics that increase the probability of their continuing to serve in a shortage area upon completion of their service obligations. The loan repayment program currently places special emphasis on physicians who are certified or eligible to sit for the certifying examination in the specialty boards of family practice, osteopathic general practice, obstetrics and gynecology, internal medicine, and pediatrics.

Under the loan repayment program, health professionals may have up to $25,000 of their educational loans repaid per year during their first two years of service at an approved site in a health professional shortage area. For subsequent years of service, the NHSC will repay up to $35,000 per year. In addition, since loan repayments are considered taxable income, NHSC physicians will receive payments to offset tax liability in an amount equal to 39 percent of the total loan repayments made during an individual tax year.

Aside from the federal loan repayment program, the NHSC bestows grants to support state-administered loan repayment agreements with primary care providers who agree to serve in one of the state's health professions shortage areas. In order to receive a grant, states are required to administer the program directly and, if necessary, make a non-federal contribution to the program. States also are directed to assign health professionals participating in the program only to public and nonprofit private entities located in and serving a shortage area.

Funding for the NHSC recruitment program, including NHSC scholarships, was $48.8 million in FY 1991, and $58.7 million was appropriated for FY 1992. The Administration's FY 1993 budget request proposed a funding level of $65.1 million for the total recruitment program. The Administration estimates that its NHSC budget request would fund 465 new scholarships, 185 federal loan repayments, and 25 state loan repayment agreements.

Disadvantaged Health Professions Faculty Loan Repayment Program: The Disadvantaged Minority Health Improvement Act of 1990 (P.L. 101-527) authorized a health professions educational loan repayment program to attract and retain health professions faculty members from disadvantaged backgrounds for faculty service at accredited health professions schools.

To become eligible for the loan repayment program, a health professions student or graduate must enter into a contact with an accredited health professions school to serve as a full-time member of the faculty for at least two years. Funding preference is given to disadvantaged individuals who are new to the field of teaching as a means of attracting such individuals to pursue health professions teaching careers.

Under the loan repayment program, the federal government agrees to repay 50 percent of the principal and interest of a participant's educational loans, not to exceed $20,000 per year, for each year of eligible faculty

service. The school is required to repay the other 50 percent of the principal and interest, in addition to the faculty salary the participant otherwise receives. However, the government may assume the school's share of payments if it is determined that the payments will impose an undue financial hardship on the school.

Funding for the loan repayment program in FY 1991, its first year, was $976,000, and $976,000 was also appropriated for FY 1992. The Administration proposed $1.1 million for the program in its FY 1993 budget request.

Indian Health Service: The Indian Health Service (IHS) loan repayment program was designed to assure an adequate supply of trained health professionals to provide health care service to Indians through Indian health programs. Participants in the program serve in full-time clinical practice at a priority site designated by IHS.

Applicants to the loan repayment program must have a degree in allopathic or osteopathic medicine, dentistry, or another qualified health profession, be enrolled in an approved graduate training program in the health professions, or be enrolled full-time in the final year of a course of study leading to a health professions degree at an accredited school. First priority is given to health professionals specializing in anesthesiology, general surgery, otolaryngology and otorhinolaryngology, obstetrics and gynecology, ophthalmology, orthopedic surgery, psychiatry, and radiology. The IHS has also developed three tiers of need by which service sites are grouped, and subsequent priority classification depends upon the tier of the site for which the health professional is selected or agrees to serve.

Participants in the program sign contractual agreements to serve for two or three years at IHS-designated sites. For each year of service, the IHS repays up to $25,000 per year of the participant's educational loans. Those who practice in the priority medical specialties receive $25,000 per year, regardless of their tier site or the length of their contract. Health professionals who serve in the neediest site, Tier I, or sign a three-year contract also receive up to $25,000 per year for loan repayment. Health professionals who sign a two-year contract and do not serve in Tier I receive up to $20,000 per year if they serve in Tier II or up to $18,750 per year if they serve in Tier III. The IHS also pays up to 20 percent of a participant's total eligible payment to the Internal Revenue Service (IRS) for all or part of the increased tax liability of the participant.

Funding for the loan repayment program in FY 1991 was $5 million, and $5.9 million was appropriated for FY 1992. The Administration's FY 1993 budget request for the program was $11 million.

NIH AIDS Research Loan Repayment Program: The Health Professions Reauthorization Act of 1988 (P.L. 100-607) established the National Institutes of Health (NIH) Acquired Immunodeficiency Syndrome (AIDS) Research Loan Repayment Program. The program is designed to attract qualified physicians and scientists to engage in biomedical research related to AIDS at the NIH. In exchange for loan repayment benefits, participants agree to conduct qualified AIDS research at the NIH for a minimum of 2 years. In fiscal year 1991, 15 researchers entered into initial two-year contracts and 4 entered into one-year renewal contracts, increasing to 34 the total number of participants in the program.

Applicants must be citizens of the United States or permanent residents, hold an appropriate doctoral degree, and have educational debt in excess of 20 percent of their annual NIH basic pay or stipend upon entering the program. The program pays a maximum of $20,000 per year directly to participants' lenders for the repayment of educational debt during the initial two-year service period. The program also reimburses participants automatically for the increase in federal tax liability as a result of loan repayments in an amount equal to 39 percent of the loan repayments made.

Funding for the loan repayment program was $1.9 million in FY 1991, and $1 million was appropriated for FY 1992. Available FY 92 funds, according to the NIH, include approximately $1.5 million carried over from FY 91. For FY 1993, the Administration requested $1.8 million for the loan repayment program.

Attachment B

The table on the following page illustrates the schedule of interest that would be applied to medical student loans during the four years of medical school and the first three years of residency training for selected levels of borrowing. The examples provided show the amount of interest added to those loans for which the borrower is responsible for interest from the time of disbursement. Loans with subsidized interest (i.e., Stafford Loans) are first deducted from the student's debt at graduation in order to determine the portion of total borrowing subject to interest accrual. The examples assume that borrowers are eligible to borrow $7,500 through the Stafford Program for each of the four years of medical school.

For example, for a graduation debt level of $50,000 it is assumed that $30,000 of the debt is accounted for by Stafford Loans. Therefore $20,000 borrowed over the period of medical school will accrue and capitalize interest from disbursement until repayment begins. The examples are based on the premise that these loans accrue simple interest (11%) during the in-school period. Interest is capitalized once at graduation and semi-annually thereafter until repayment.

If a student borrows $5,000 annually through interest bearing loans (to the student) during medical school, the loans accrue $5,600 in interest prior to graduation. During a three year residency, the frequency of interest capitalization will add an additional $9,697 to the student's loan balance resulting in a total educational debt of $65,297 at the completion of the third year of residency.

If the student's loan interest during residency was subsidized as an incentive for generalist training, the total three year cost in this illustration would be $8,679. This would result in a total education debt of $55,000 instead of $65,297. The savings to the resident would be the $9,697 in interest which is capitalized into principal over these three years, as well as the very substantial interest payment savings over the 20 year repayment life of the loan.

SCHEDULE OF INTEREST APPLIED TO MEDICAL STUDENT LOANS DURING IN-SCHOOL AND THREE YEAR RESIDENCY PERIOD FOR SELECTED BORROWING LEVELS

Total Educational Debt (Loan Principal) at Graduation	$50,000	$60,000	$70,000	$90,000		$100,000
Total Loan Principal for which Interest is Paid for Borrower until the Third Year of Residency (i.e., Stafford Loan)	-$30,000	-$30,000	-$30,000	-$30,000		-$30,000
Total Loan Principal that Accrues Interest from Disbursement to the Borrower (i.e., HEAL, SLS)	$20,000 ($5,000/yr)	$30,000 ($7,500/yr)	$40,000 ($10,000/yr)	$60,000 ($15,000/yr)		$70,000 ($17,500/yr)
Total Interest Applied during In-School Period*	$ 5,600	$ 8,250	$11,000	$16,500	$19,250	
Total Principal and Interest at Graduation Start of Residency	$25,600	$38,250	$51,000	$76,500		$89,250
Interest Added during Residency Training**						
First Year	$ 2,893	$ 4,323	$ 5,764	$ 8,6[illegible]	$10,088	
Second Year	$ 3,220	$ 4,812	$ 6,416	$ 9,624	$11,228	
Third Year	$ 3,584	$ 5,356	$ 7,141	$10,711	$12,497	
Total Interest for Three Year Residency Period	$ 9,697	$14,491	$19,321	$28,982	$33,813	
Total Loan Principal and Interest at Completion of Three Year Residency	$65,297	$82,741	$100,321	$135,482		$153,063

* Simple interest accrual @ 11 percent.

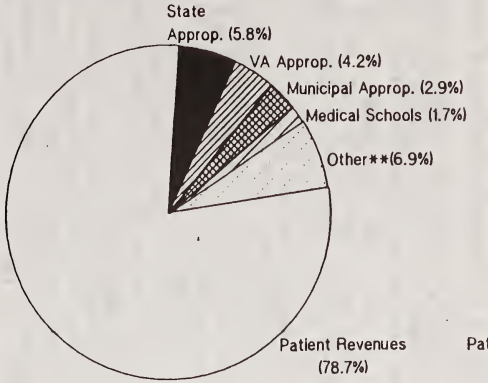
** Interest capitalized once at graduation and semi-annually thereafter until the beginning of repayment @ 11 percent.

Chart A

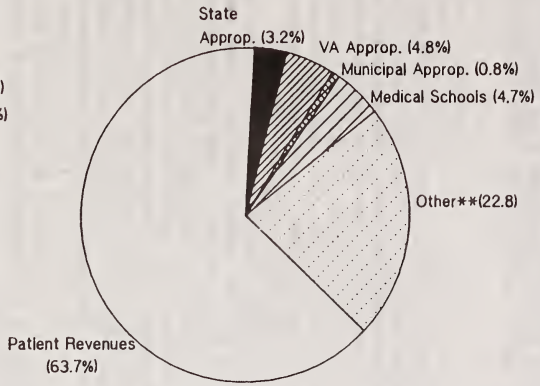
Sources of Funding for Housestaff Stipends and Benefits

All Hospitals, 1990-91*

Resident Stipends and Benefits



Clinical Fellow Stipends and Benefits



* Excludes Veterans Administration hospitals

** Includes Physician Fee Revenue, NIH and other federal agency funds, endowment income, and foundation grants.

Source: AAMC Council of Teaching Hospitals, Survey of Housestaff Stipends, Benefits and Funding, 1991.

Prepared Statement of Michael J. Hodapp

Mr. Chairman, members of the committee, I am Michael J. Hodapp, M.D., a pediatrician from Willmar, Minnesota and a member of the American Academy of Pediatrics. I am here today representing 43,000 members of the Academy as well as American children and families, all of whom are grateful to you for your longstanding leadership in health care issues. I am also here on behalf, of the 76,000 physicians specializing in internal medicine that comprise the American College of Physicians (ACP).

OVERVIEW

During the past year we all have been embroiled in the health care reform debate. Both the Academy and the ACP have been part of this discussion and debate. Just last month we presented testimony before you and other members of the Finance Committee on our respective visions of comprehensive health care reform. We believe, and I know that you share our belief, that preventive care and primary care services are critical to any proposal designed to provide a healthier future for our nation's citizens. This includes ensuring an adequate supply of all types of primary care physicians to meet the anticipated demand.

Primary care is pediatrics, internal medicine and family medicine. These specialties have some significant differences in training and focus, but many similarities. All primary care physicians are broadly and extensively trained to efficiently deliver a full range of services from preventive medicine to comprehensive and consultative patient care services. These physicians must be able to recognize and manage complex illnesses and multiple illnesses involving different organ systems in the same patient. Primary care physicians provide continuous care to their patients.

Medicare beneficiaries, children, adolescents, minority groups, and others denied appropriate first contact care would be among the first to suffer from inadequate access to primary care physicians. Efforts to improve access to health care services for all Americans will be doomed to failure and excessive costs, if we do not have sufficient numbers of primary care physicians who can diagnose and promptly treat most medical illnesses.

Pediatricians continue to treat the largest percentage of children in the preschool and infant age groups. While older children and adolescents traditionally have received care from internists and family physicians, increasingly pediatricians are providing primary care services for these groups as well as infants and children. Generalists who provide care to adolescents from 14–21 years old—including pediatricians, internists and family physicians—must be highly trained to deal with increasing problems such as drug abuse, sexually transmitted diseases, unwanted pregnancies and disease prevention and promotion of healthy habits and lifestyles. The number **and** skills of primary care physicians must be increased to address the needs of this growing and already medically underserved population.

Faced with the increase in AIDS; behavioral and learning problems; family violence and child abuse; and the abuse of tobacco, alcohol, and other substances, future generalist physicians, among these general pediatricians and general internists, will be expected to manage children and families with these complex conditions. In addition to treating children and adults with acute diseases and injuries, more patients with chronic illnesses will require treatment by primary care physicians. Moreover, passage of national health reform legislation which would eliminate financial barriers to needed health care for many children and families, would generate an enormous increase in demand for primary care physicians.

Primary care physicians are the most appropriate and economical providers of preventive health care. Therefore, it is important to ensure that issues such as education debt and low reimbursement for services do not preclude medical students from choosing primary care specialties. The substantial improvement of the resource-based relative value scale (RBRVS) and the development of a pediatric RBRVS will be significant determinants in whether the erosion of primary care specialties can be reversed. In addition, steps should be taken to address the current geographic maldistribution of physicians and the under representation of minorities in medicine.

TRENDS IN MANPOWER SUPPLY

Developing forecasts for physician manpower needs has not been an easy task. Various published reports have suggested an overall oversupply of physicians. Nevertheless, the evidence has consistently indicated shortages of primary care generalist physicians. A few demographic trends in manpower are worth noting as we consider and examine this issue.

One issue of paramount importance to any discussion of primary care manpower is the growing number of women in medicine. In the past twenty years the number of women in medicine has quadrupled—approximately 17% of all physicians are women. In pediatrics more than 50% of physicians in residency training programs are women. Approximately 30% of first-year residents in internal medicine are women, reflecting a steady increase each year since 1976 when only 12% of the entry slots were filled by women. The American Medical Association (AMA) projects that by the year 2010, 30% of all physicians will be women.

Future projections aside, there is currently a substantial number of women already in primary care specialties. According to AMA findings, in 1990, 38% of all pediatricians were women and approximately 20% of specialists in general internal medicine were women. Clearly then, considerations that were once considered "women's issues" will have implications in both training and practice for the entire primary care physician population. These issues include family leave provisions, residency hours and working conditions, tenure tracks in academic medicine, part-time and shared positions, economic parity with male physicians and more.

With this notable growth of women in medicine, especially pediatrics, and with the increase of dual-career marriages, lifestyle and childbearing considerations greatly influence career-related decisions by both men and women. It is essential that any planning efforts recognize that more physicians are needed now to provide the same number of patient care hours since both men and women are less able and willing to devote the once common 70-hours per week to medical, practice.

Another point to consider when examining manpower supply is the issue of international medical school graduates (IMGs). Thirty-one percent of pediatric residency positions and nearly 29% of internal medicine residency positions are currently filled by IMGs. About 25% of IMGs return to their native countries after training is completed. Therefore, projected numbers of primary care physicians coming out of the educational pipeline must be adjusted for IMGs who exit the system.

TRAINING

The results of the 1992 National Resident Matching Program (NRMP) show an increase in the number of residency positions filled in all of the primary care specialties. However, over the last several years, interest in primary care specialties has declined among U.S. medical students, and the fill rates are still lower than they were in 1985.

According to the most recent data collected by the AMA, in 1990, there were over 40,000 pediatricians (both board certified and non-board certified) in the United States. Over 90% were identified as being in direct patient care, with more than 50% delivering primary care in the office setting. There are a total of 140 specialists in internal medicine, the majority of whom are in private practice

Currently, 215 U.S. programs train pediatricians. Approximately 6,200 pediatricians are in residency at any time. Additionally, over 1,000 men and women are in subspecialty training. Fifty-four percent of pediatric residents are women and 31% are IMGs. In 1992, according to the NRMP a total of 1,695 pediatric positions were filled in the March Match. There were 1,325 U.S. medical students and 316 foreign born graduates. The remaining 54 positions were filled by graduates of Canadian medical schools, osteopaths, and fifth pathway students.

For internal medicine, there are currently 428 programs and 20,709 physicians in training. This year, 7,403 first-year residency positions were offered and 6,071 (82%) were filled through the NRMP. Nearly 60% (4,429) of the PGY-1 residents in the match were graduating seniors from U.S. medical schools, 1,397 were foreign medical graduates, and 245 were other physicians, primarily graduates of osteopathic medical schools.

Despite some strides during the 1970's in increasing minority representation in residency training, the proportion of residents from minority groups remains below that of the general population. Only 5% of first-year residents are African Americans or Hispanic. For reasons to be discussed later in this testimony, the Academy and the ACP believe that all barriers that exist for qualified minorities to enter the practice of medicine must be removed.

During the decade from 1980–81 to 1989–90, the number of residency positions in internal medicine offered through the NRMP grew by 24%, but most of the additional positions were filled by foreign medical graduates. Since 1976, the proportion of positions filled by U.S. medical school graduates has been steadily declining.

Recent surveys of practicing physicians, residents in internal medicine and medical school graduating students indicate that greater proportions of young physicians are choosing subspecialty careers over primary care practice. Nearly one-fourth of all physicians entering internal medicine residency training programs drop out or

switch to another specialty after one year. Most of these residents are in preliminary programs that are designed to provide one-year of general training prior to entering another specialty. Many of the others become disaffected. One study of U.S. medical students revealed that internal medicine had been "seriously considered" but rejected by 50% of those who ultimately chose other medical careers.

Since 1985, progressively fewer U.S. medical school graduates have entered categorical, primary care, and medicine-pediatrics residency programs. The trend of declining interest in primary care careers is reaching the crisis stage. Indeed, many medical educators would argue that a crisis is already at hand.

Why Students Do Not Choose Primary Care. Factors that have been identified as deterring students from entering primary care include perceptions that the work is more demanding, more stressful, and less satisfying. The relatively low earnings potential compared to other specialties is one of the most obvious and frequently cited reasons. AMA data show that physicians practicing internal medicine, pediatrics and family medicine earn average net incomes that are less than half those of surgeons, radiologists, anesthesiologists, and obstetricians/gynecologists.

Low earnings potentials coupled with high medical school tuition and rising student debt are having profound effects on medical career choices. One recent article claimed that medical school tuition is the "single most important reason for the precipitous increase in the indebtedness of young physicians." It noted that the average debt for medical students at the time of graduation was $46,224 in 1990, an increase of 77% after accounting for inflation over the past decade. Other factors include administrative burdens, the threat of malpractice litigation, loss of clinical autonomy, loss of control over clinical decision making, and lack of leisure time.

Federal support for graduate medical education (GME), through Medicare and other programs, could be structured so as to provide incentives for greater numbers of students to enter primary care careers. However, there are other factors in need of reform beyond the scope of federal involvement in medical education that should be addressed if we are to train greater numbers of pediatricians, internists and other primary care physicians. These include greater academic recognition of generalists, removal of institutional barriers to training outside of the hospital, and updating of student and residency curriculum.

Indebtedness. There are several short-term actions that could be taken to address educational debt, a factor that the Academy and the ACP believe influences medical students and residents to choose higher paying specialties and subspecialties. Our recommendations also are intended to remove the financial roadblocks that exist for minorities to enter medicine.

We support flexible loan policies that provide financial incentives for students entering primary care careers. Consequently, we favor policies such as restructuring student loan repayment schedules so that they are based on a percentage of earnings, loan forgiveness in return for service in underserved areas, and forbearance and deferment of low interest loans for those entering primary care.

Medicare GME. The future funding of graduate medical education will have serious implications for pediatrics and internal medicine. Residency programs are largely funded by the allocation of patient derived income (primarily from private and public third-party payers and government sources), by Medicare training funds, and by federal grants. The Academy and the ACP believe that a high level of federal financial support, including the Public Health Service (PHS) Title VII program, is vital to all primary care GME.

Medicare plays a significant role in funding both the direct and indirect costs of graduate medical education. Increasing Medicare allowable payments for the direct costs of medical education, including house staff stipends, to encourage primary care training in pediatrics, internal medicine, family medicine, and geriatrics could have a substantial effect on increasing the attractiveness of residency training in these fields. Other incentives, such as special targeted grants may be needed to provide assistance to programs that are now unable to fill existing primary care residency positions.

Efforts to attract students to primary care careers may need to begin well before medical school. Experiments now underway by the National Health Service Corps to expose high school and college students to primary care in community and outpatient hospital clinics provide models that might be adapted and expanded to reflect the new and growing national commitment to primary care. Schools and programs that make an institutional commitment to primary care, e.g., the Primary Care Institute at Temple University in Pennsylvania, elevate its status to employ a variety of strategies to attract students including mentoring, curriculum, research and advocacy of primary care. As we address the range of strategies to produce more primary care physicians, we should not overlook the attraction of many to serve the national interest.

PHS Title VII Programs. Title VII, the Primary Care Residency Training Grant for General Internal Medicine and General Pediatrics program, is a small but crucial source of funding for the training of generalist physicians in pediatrics and internal medicine. Given the complex needs of their patients, pediatricians and internists will be called upon to utilize community resources and to collaborate with other health care givers. This means that their educational experience must reflect these needs. Training is often best accomplished using a variety of non-traditional training sites and settings.

Unfortunately, such training can be, and often is, expensive. Ambulatory care and out-of-hospital sites do not generate the same level of income as inpatient, tertiary, and procedure-oriented care. However, current payment sources, whether from direct payment by the patient or through third-party reimbursement have been eroding, and typically do not cover the costs of physician training in these non-traditional sites. Studies that have been done over the past few years have shown that 97% of the pediatric residents involved in the primary care training programs have gone on to practice pediatric primary care; 52% of these serve in rural or socioeconomically deprived urban areas. Such a record proves that it is possible to train primary care physicians who will serve the neediest populations, but only if the funding is available for these more expensive programs.

Selection of Medical School Applicants. The Academy and the ACP support initiatives designed to attract and select medical school applicants who are most likely to seek careers in primary care. To ensure success, several aspects must be considered. Medical schools must develop guidelines that will facilitate widespread implementation of the selection program. These guidelines must include strategies to ensure that the current high quality of medical students in primary care is maintained.

There is a growing school of thought that suggests that changing selection strategies is far from adequate, and that ongoing communication and mentoring are critical to the selection of a specialty. Therefore, in order to achieve the stated goal of increasing the number of primary care physicians, including pediatricians and internists, it is important that the initial interest in primary care be fostered throughout his/her medical school career. A program of communication and mentoring should include increased exposure of medical students—and residents—to ambulatory care and community settings. Too often medical students' contact with primary care physicians is limited or nonexistent because the majority of medical school faculty are subspecialists. Therefore, particular emphasis should be put on developing model clerkships in ambulatory settings to give medical students a true and favorable picture of the primary care practice environment. These clerkships must include pediatrics and internal medicine as well as family medicine.

For many institutions, this will represent a break with traditional perspectives and policies. Therefore, medical schools must be encouraged to implement new selection programs and medical student communication/mentoring programs. Even enhancement of the current Title VII grant program, while certainly helpful, will not be enough. Academic medical centers must be given the opportunity to develop innovative primary care training.

SUBSPECIALIZATION

In recent years, both the number of pediatric subspecialties and the number of pediatricians in subspecialties have grown. Some pediatric subspecialty training—such as general ambulatory, adolescent, and developmental pediatrics—is undertaken for the sole purpose of increasing the scope of primary care services by pediatricians. Others specialize in highly technical areas and care for children with complex diseases. Many of these children are living longer and require the expertise of pediatric subspecialists.

Subspecialization is much more common in internal medicine than in pediatrics. Some estimates show that only a third of internists do not go on to subspecialty training in geriatrics or one or more of the 12 subspecialties of internal medicine recognized by the American Board of Medical Specialties. Many subspecialists, however, devote substantial portions of their practices to primary care.

The increased demand for subspecialists due to complex illnesses faced by children, adolescents, and adults today points to a continuing need for primary care physicians and subspecialists.

IMPLICATIONS OF THE MINORITY COMPOSITION OF PEDIATRICS/INTERNAL MEDICINE

The widening gap in the health status between non-minority and minority people has received considerable attention over the past few years. In fact, many of the U.S. Public Health Service's Healthy People 2000 objectives are intended to address

the high concentration of disease and disability among racial and ethnic minority populations. Minorities—in particular children—are found to have less access to health care independent of their health status, sex, economic status and place of residence.

Some analysts maintain that increasing the number of minority health care providers has the potential to increase access, thereby offsetting some of the difficulties that the underserved have experienced in obtaining adequate health care. This is predicated on government reports that show that minority physicians are more likely to practice in underserved areas and are able to bring a greater sensitivity to the cultural and socioeconomic status of their underserved patients, thereby having the potential to deliver health care services more effectively.

More minority physicians alone will not in itself solve the problem; however, more caring, concerned physicians who are involved in primary care and providing health care for minority infants, children and adults can affect the health status of minorities. We support efforts to offer greater opportunities for minority medical students in all aspects of medicine, including primary care.

GEOGRAPHIC DISTRIBUTION

Meeting the needs of dispersed rural populations and urban/inner city populations is especially challenging. Academy and the ACP members in underserved areas are committed to their patients, to their communities, and to providing the highest quality of care. However, there are a number of barriers and/or disincentives that must be overcome to encourage the location of health professionals in underserved areas. These include: inadequate reimbursement rates; federal regulations that do not take into account the realities of rural practice; lifestyle preferences, including social, cultural and educational considerations; and the availability of medical resources, such as location of hospital facilities, access to continuing medical education and the proximity of medical colleagues.

We support financial incentives to attract and to retain dedicated professionals to underserved areas. This should be a multifaceted approach that considers issues such as expansion of the National Health Services Corps, other loan forgiveness programs, and more favorable reimbursement.

CONCLUSION

This Committee, by advocating for the health care needs of the nation's people, must assume a leadership role in ensuring the production of more primary care physicians in the specialties of pediatrics, internal medicine, and family medicine. To meet the demand for primary care services now and in the future, the medical profession, in tandem with the federal government, will need to be creative and aggressive, as well as united in purpose.

PREPARED STATEMENT OF GERALD C. KELLER

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Gerald C. Keller, M.D., Vice President of the American Academy of Family Physicians. I appreciate your invitation to testify at this important hearing today on the training and specialty distribution of American physicians.

It is widely agreed that a rational, organized and cost effective health care system must be based on a foundation that includes a majority of physicians trained as generalists—family physicians, general practitioners, general internists, and general pediatricians. The reason for this is clear when one understands what these physicians are trained to do.

On a daily basis, family physicians and other generalists provide first contact care for patients who come to us for help with potentially serious, unidentified health problems. Evaluating symptoms, gathering all pertinent information, forming an initial diagnosis, and designing and managing a treatment plan that is appropriate and helpful to the patient—and doing so correctly and cost efficiently—is one of the greatest challenges in medicine today. It is what we are trained to do best.

Generalists provide comprehensive patient care, not limited to a specific disease or organ system. We provide preventive health services and treat common and more serious acute and chronic conditions. In approximately 10 percent of cases where consultation with or referral to a subspecialist is appropriate, we coordinate care of the whole patient. Finally we provide continuous care for our patients over time, not just for the duration of a single procedure, hospital stay, or illness. The history of the specialty of family practice is summarized in the attached appendix.

The United States is unique among the developed nations of the world in our extent of physician subspecialization. Approximately 30 percent of our physicians are generalists, and this proportion is declining. Recent surveys of graduating medical school seniors indicate that interest in generalist careers has fallen below 23 percent. By contrast in most other nations half or more of physicians are generalists.

To date, our medical specialty maldistribution has not been a prominent issue in the larger national debate about health care reform. However, it is a key issue that must be addressed if we are truly to guarantee all Americans access to affordable, appropriate health care.

In so doing it is important to understand that the over-subspecialization of American medicine did not occur by design. Rather it was caused and endures because of a variety of features in our systems of medical education, health care delivery and health care finance—including many explicit federal laws and policies—which strongly, though unintentionally, discourage generalist practice and primary care. Unless corrected these strong disincentives are likely to frustrate direct efforts to balance our physician specialty mix.

THE CLIMATE FOR GENERALIST MEDICINE

Though the climate for generalist medicine in the U.S. today is not highly supportive, the news for family physicians and other generalists is not all bad. Study after study confirms the positive impact of generalist physicians on the quality and cost effectiveness of health care.[1] Further, many distinguished expert organizations—the American Medical Association, the Institute of Medicine, the Association of American Medical Colleges, the Council on Graduate Medical Education, and others—have recommended that the United States achieve a specialty mix of at least 50 percent generalists.

Today's managed care organizations are putting these findings and recommendations into practice. More than half of all physicians staffing group and staff model HMOs are classified as "primary care" physicians. These managed care plans rely more heavily on family physicians than any other specialty in achieving this specialty mix.[2] Operating in a market with a shortage of generalist physicians, managed care plans have bid up the starting salaries of family physicians, offering more lucrative employment options for the new doctor completing residency training than existed even a few years ago.

Basing Medicare physician payment on the resource-based relative value scale is another sign of hope for generalist medicine. In spite of the many serious problems already encountered in the early months of implementing the fee schedule, the AAFP continues to support an RBRVS-type payment methodology to rationalize payments and help neutralize some of the more serious economic disincentives for physicians to enter generalist practice.

There are encouraging signs that today's emphasis on managed care, and the central role of generalist physicians in managed care plans, is sparking new interest in generalist medical careers. Today about one-fourth of all medical students have become student members of the AAFP. In addition, after a decade of declining interest in generalist careers, this year the number of graduating medical students selecting residency training in the generalist specialties increased slightly. The Academy hopes that these changes signal a resurgence in generalism, but there remain many causes for serious concern.

Many features inherent in our American systems of medical education and health care finance and delivery continue to discourage physicians from entering and remaining in generalist fields, and discourage the delivery of health care based on a primary care model. Among these features are:

---

[1] See Starfield, Barbara, "Primary Care and Health, A Cross-National Comparison," *Journal of the American Medical Association,* October 23/30, 1991. A comparison of ten nations on the basis of their primary care systems found better health outcomes and higher public satisfaction with both the health system and its cost in nations where a primary care model of health care delivery predominates.

See also Greenfield, Sheldon, et. al., "Variations in Resource Utilization Among Medical Specialties and Systems of Care," *Journal of the American Medical Association,* March 25, 1992. A study of treatment patterns across medical specialties found generalists (family physicians and general internists) to be more cost-effective than subspecialists (cardiologists and endocrinologists) in treating and managing health problems of comparable patient panels.

See also Holahan, John and Dor, Avi, "Urban-Rural Differences in Medicare Physician Expenditures," *Inquiry,* Winter 1990. A comparison of Medicare spending in rural vs. urban communities, controlling for differences in prices, health status, access to hospitals, and other factors, found the higher concentration of family physicians in rural areas is the most important factor explaining the lower cost of care in rural areas.

[2] Group Health Association of America, 1991 HMO Industry Profile, Volume 2, p. 9.

1. *A continued lack of emphasis on family medicine in medical schools*—More than half of American medical schools still do not require a clerkship in family medicine as part of their required curriculum. Further, many of the "best" medical schools have not established formal departments of family medicine. As Table 1 shows, medical students are much more likely to select family practice if they are exposed to this field in school and if their academic role models espouse the importance and rewards of family medicine. As Table 1 also shows, the more medical schools emphasize their biomedical research mission, the less likely they are to emphasize teaching of family medicine.

Not only does family practice lack presence in some schools, often students expressing interest in generalist careers have been actively discouraged from pursuing them. Many of my colleagues, as medical students, were advised, "you're too smart to go into family practice," or "you'll be bored in that field," or "your kids can always swim in my pool."

2. *Lack of federal support for generalist residency training*—The primary source of financial support for residency training comes from the federal government, through Medicare as well as Medicaid and the Veterans Administration and Department of Defense residency programs. Medicare GME reimbursement, totalling $4.2 billion last year, is paid exclusively to hospitals. Ambulatory GME training is only reimbursed in those relatively few programs operated and paid for by hospitals. Further, with some exceptions, Medicare GME payment formulas assign equal value to subspecialist and generalist residents, even though the former are in surplus and the latter in shortage.

3. *Low pay and long hours*—Family physicians and other generalists continue to earn less than all other medical subspecialists. The average family physician's pretax net earnings in 1990 was $103,000, compared to $164,000 for all physicians. The lowest income quartile of family physicians earned less than $65,000. Because family physician income is derived largely from relatively inexpensive office visits, they tend to work longer hours and encounter many more claims payment hassles. In rural areas, where many family physicians practice, often as the sole health care provider in their community, the problems of low pay and red tape can be even more discouraging.

4. *Lack of insurance coverage for primary care*—Many insurance policies, including Medicare, offer scant coverage for the services provided by generalist physicians. In addition to not covering preventive care and primary care case management services, the cost sharing requirements in many policies can effectively negate coverage for the kinds of cost effective services generalist physicians provide. For example, a patient with a policy requiring a $50 deductible and a $10 copayment per office visit who sees her family physician for three $30 office visits in a year will find her insurance pays $20, or 22 percent of these charges. By contrast, if the same patient were to see a subspecialist for a $250 in-office procedure once in a year, her insurance policy would pay $190, or 76 percent of charges.

Rx FOR CHANGE

The American Academy of Family Physicians already has testified before this Committee on the elements of our comprehensive reform strategy, "Rx For Health." As you may recall, key to our recommendations were specific strategies to change the U.S. physician specialty mix over time to reach a goal of 50 percent generalists, one-half of whom would be family physicians. To reiterate, our recommendations include:

1. Adoption of an explicit national policy to promote generalist medicine.

   Federal policy should state that in time, at least one-half of all physicians in the U.S. should be in general medical specialties and further, that at least one-half of all generalist physicians should be family physicians.

2. Structuring of federal financial incentives to encourage medical schools to emphasize the training of generalist physicians.

   A number of federal programs today provide major financial support to medical education organizations. Federal taxpayer support, including grants from the National Institutes of Health that offset universities' overhead expenses, must be altered so that schools increase emphasis on generalist training and graduate more physicians who will enter generalist practice.

3. Structuring of federal financial incentives to encourage residency training of generalist physicians.

   Specifically, Medicare GME payment would be restricted to only the first three years of residency training. Payment formulas would be changed to weight fam-

ily practice and other generalist residencies more heavily than other specialists. Finally ambulatory residency training would be eligible for Medicare GME reimbursement.

4. Structuring physician reimbursement and other financial incentives to promote generalist practice.

Payment for all physicians should be based on an RBRVS-type reimbursement system. In addition, student loan repayment policies should be structured to support physicians entering generalist practice, especially in underserved areas.

5. Building the primary care health care delivery model back into all health plans.

As these policies gradually correct the specialty maldistribution of physicians, all health insurance plans—whether "managed care" or other types—should require their enrollees to designate a Personal Physician, who would be a family physician, general internist, or general pediatrician. All health insurance plans should exempt critical preventive services (prenatal care and well child care) from all cost sharing. Deductibles should be waived for all other health services provided by the Personal Physician, and no more than 20 percent coinsurance should apply to these services. Finally, patients seeking care from subspecialists without appropriate referral from their Personal Physician should be subject to an additional 20 percent coinsurance penalty.

An effective strategy for balancing the specialty distribution must address all of the major factors affecting physicians' career choices from their application to medical school to the financial and professional environment of practicing medicine. The Academy urges adoption of such a comprehensive reform strategy.

THE KEY ROLE OF MEDICARE

This Subcommittee's jurisdiction over the Medicare program places you in a central position to effect reform. Because of its sheer size and key constituency, Medicare payment and coverage policies have enormous influence in our health care system and significantly affect the climate for generalist medicine. Therefore the Academy urges this Subcommittee's consideration of reform in the following specific areas:

Medicare graduate medical education payments—The Academy urges this Subcommittee to adopt the reforms outlined in "Rx For Health." Direct and indirect costs of outpatient residency training should be reimbursed by Medicare. These costs to the program should be offset by reweighting GME payment formulas to assign a lower weight to subspecialty residents. A step in the direction of such reweighting would be accomplished by the adoption of a provision in H.R. 5502, recently reported by the House Ways and Means Subcommittee on Health.

Alternatively, the Subcommittee should strongly consider eliminating all Medicare GME reimbursement for the training of residents in any specialty that is in oversupply.

Medicare physician payment—The Academy urges the following changes to improve the equity and adequacy of Medicare payment for generalist physician services as originally intended by the RBRVS reform:

- accelerate the transition to the Medicare RBRVS fee schedule,
- eliminate the rural/urban differential in Medicare payments to physicians,
- adopt a resource-based reimbursement system for physician cost of practice,
- revise RBRVS payment for visit services to more accurately reflect the higher intensity of services provided during shorter visits, and
- establish a separate and higher Medicare Volume Performance Standard (VPS) for primary care services.

The likely impact of the new VPS program on payment for primary care office visits next year merits elaboration. As you know the 1989 reform legislation established separate performance standards for surgical and non-surgical services. The dual VPS will affect Medicare payment updates for the first time in 1993. The non-surgical VPS includes a range of services and procedures with widely varying impacts on the growth spending. One recent study of the components of Medicare annual spending growth between 1985–1988 found that spending for office visits grew less rapidly than Medicare spending as a whole (11 percent vs. 12.3 percent, respec-

tively.) By contrast, spending for sigmoidoscopy grew by 20.2 percent, arthroscopy by 60.2 percent, and magnetic resonance imaging by 407.7 percent.[3]

The current division of surgery and non-surgery in the Medicare VPS program distorts Congress' ability to track key components of spending growth. Furthermore it will undermine payment reform—designed to encourage a substitution of primary care for procedures—by penalizing future growth in the volume of evaluation and management services. Indeed, the Secretary of Health and Human Services forecasts a 1993 payment update of 0.3 percent for non-surgical services, including primary care visits, compared to 2.6 percent for surgical services. In light of this perverse outcome Congress should establish a separate and higher VPS for primary care services. Failing this, a single payment update should be applied to all Medicare services.

Medicare benefits—Finally in the area of Medicare coverage the Academy supports expanding Medicare payment for preventive health care services. We further support introduction of the concept of a Personal Physician, as outlined in "Rx For Health," to coordinate Medicare patients' health care services. Patient cost sharing should be reduced for services provided by their Personal Physician.

CONCLUSION

Mr. Chairman, family physicians do not intend to over-promise our abilities to strengthen and improve our nation's health care system. Even with a properly balanced specialty mix, our health system and our citizens' health will face severe strains from poverty, discrimination, violence, drugs and other social ills. Medicine will continue to need support from outcomes research to understand and promote the appropriate use of health care services and technology. The nation still will need a comprehensive strategy to guarantee access to care and to assure affordability.

Yet if the nation does not address our critical shortage of generalist physicians these many problems will be exacerbated. There will not be enough skilled generalists for all Americans to have a Personal Physician. Our practice patterns will continue to tilt too heavily toward expensive, high tech proceduralist medicine. Patients will be even more bewildered by our complex and uncoordinated health care delivery system, and their care will continue to suffer.

The American Academy of Family Physicians urgently recommends your attention to this most basic health care delivery system reform, and immediate action to promote the training of more generalist physicians. I will be happy to provide additional information on any of the topics discussed in this statement and pleased to answer any questions you may have.

Table 1.—CHARACTERISTICS INDICATING RELATIVE EMPHASIS ON TEACHING FAMILY MEDICINE AND ON BIOMEDICAL RESEARCH IN SELECTED MEDICAL SCHOOLS

Medical School	Percent of seniors entering family practice residency programs in 1990	Medical school has dept. of family medicine?	Medical school requires family medicine clerkship?	FY 1990 Federal biomedical research extramural awards (in millions of dollars)
Cornell	0.0	no	no	40
Columbia	0.7	no	no	82
New York Univ.	0.7	no	no	51
Univ. of Chicago	0.9	no	no	60
Johns Hopkins	1.0	no	no	120
Harvard	1.8	no	no	58
Yale	2.9	no	no	98
Emory	4.2	no	no	31
Boston Univ.	4.3	no	no	34
Stanford	5.6	no	no	101
Univ. of Minnesota at Minneapolis	21.9	yes	no	54
Univ. of California at Irvine	23.9	yes	yes	15
Mississippi	24.5	yes	no	6
East Carolina	24.6	yes	yes	3
Medical College of Virginia	25.3	yes	no	29
Southern Illinois	25.8	yes	yes	2
North Dakota	26.0	yes	yes	(1)

[3] Berenson, Robert and Holahan, John, "Sources of Growth in Medicare Physician Expenditures," *Journal of the American Medical Association,* February 5, 1992.

Table 1.—CHARACTERISTICS INDICATING RELATIVE EMPHASIS ON TEACHING FAMILY MEDICINE AND ON BIOMEDICAL RESEARCH IN SELECTED MEDICAL SCHOOLS—Continued

Medical School	Percent of seniors entering family practice residency programs in 1990	Medical school has dept. of family medicine?	Medical school requires family medicine clerkship?	FY 1990 Federal biomedical research extramural awards (in millions of dollars)
Wright State	31.3	yes	yes	2
Marshall Univ.	31.6	yes	yes	(1)
Mercer	34.8	yes	yes	(1)

[1] Signifies less than $1 million

APPENDIX.—HISTORY OF FAMILY MEDICINE

Before World War II, 80 percent of all physicians in the U.S. were in general practice. The old fashioned G.P. was a trusted family friend who delivered the babies, cared for the grandparents, and handled virtually every health condition in between, from colds and flu to hypertension and appendicitis. While old fashioned generalist medicine wasn't always very fancy, it was grounded in common sense and an understanding of the whole patient, his or her environment, needs, and capabilities.

Postwar America saw an explosion of scientific and biomedical research, fueled largely by the establishment of the National Institutes of Health. In 1940 the federal government's share of funds for biomedical research amounted to only $3 million. By 1987 the federal share amounted to $7.6 billion. This new and generous flow of federal research dollars produced the medical miracles that have saved so many lives, and that have made the American health care system the technologic envy of the world.

Unfortunately the promotion of biomedical advances was accompanied by other changes that had unforseen effects on medical education and patient care.

Generalism's decline in medical schools—One major change occurred in the orientation of medical education, itself. The challenge and excitement of biomedical breakthroughs naturally attracted faculty and curricular attention, and this change in focus was strongly reinforced by financial trends. Whereas pre-war medical schools relied heavily on income from student tuition and fees, postwar schools were transformed into large academic research centers with almost two-thirds of their revenue derived from two main sources—federal biomedical research grants and fees charged by faculty clinical practice plans. The main revenue-generating departments were in the medical and surgical subspecialties. Consequently their influence over medical school culture and curriculum increased while emphasis on training generalist physicians declined correspondingly. Many subspecialists began to look down on their generalist colleagues as less advanced scientifically, and to consider G.P.s as little more than a patient referral service. By 1960, only 30 percent of U.S. physicians were in general practice.

Advent of Medicare payment for graduate medical education—Enactment of Medicare and its payments for graduate medical education (GME) bolstered the emphasis on and growth of subspecialization. Only hospitals receive Part A Medicare GME payments to reimburse a portion of their costs of residency training programs. Medicare GME payments now comprise half of all such payments supporting residency training. Teaching hospitals have come to rely on residents as an inexpensive source of medical staff to provide patient care and generate patient care revenue. Residents in teaching hospitals are trained to care for severely ill patients employing the most advanced technological tests and procedures to help these patients. This training reinforces a pattern of patient care that is episodic and highly resource intensive. Exposure to ambulatory patients with undifferentiated health problems is the exception to the rule.

Problems in patient care—The increasing subspecialization of medicine—even while advancing possibilities in patient care—also had the detrimental and unintended effect of balkanizing patient care. Patients with undiagnosed health problems often became hard pressed to know which subspecialist to call. Chest pain offers one example. In roughly half of cases, chest pain is a symptom of heart disease. However gastrointestinal disorders, musculoskeletal problems, psychological stress and other causes can produce chest pain. Without the medical knowledge to evaluate one's own symptoms and case history, the patient can either go to the emergency room or guess which medical subspecialist to consult first. As a result patients can ping-pong through the system in search of appropriate diagnoses and

care, use emergency rooms and subspecialist services unnecessarily and at great expense, and at times even delay urgently needed care.

In addition to problems with initiating care, patients began to face dangerous problems in coordination of care for multiple health problems treated by more than one subspecialist. Adverse drug interactions in the elderly, whose doctors may unknowingly prescribe medications incompatible with other medications, is one of the serious consequences of lack of coordination and continuity. The decline in generalism created a severe shortage of physicians trained to care for the whole patient—coordination critical to assuring quality and appropriateness.

Family practice established—The specialty of family practice was established in 1969 in response to a perceived need by the public, the medical profession, and the government for the development of a well-trained generalist to address these many problems. Family practice is the specialty of breadth that is concerned with the total health care of the individual and family. The scope of family practice is not limited by age, sex, organ system or disease entity. The family physician is an expert in the evaluation and management of common health problems, but also often manages more serious acute and chronic illnesses in their patients. Today's family physician relies increasingly on modern computer software and medical databases providing ready access to ever-expanding amounts of information and continuing education to assist in patient care. In less than 10 percent of cases will the family physician need to consult with or refer a patient to a subspecialist.

Before entering practice the family physician must complete a 3-year residency program which includes, in addition to broad hospital training, extensive training in comprehensive and continuous outpatient medicine in model clinics called family practice centers. Residents begin developing their own panel of patients and families from the outset of their first year and provide continuous care for them throughout the residency.

Family practice training is unique in that over 95 percent of physicians entering family practice residencies end up in family practice. By contrast, 28 percent of pediatric graduates and 66 percent of internal medicine graduates eventually elect to subspecialize.

Family practice was the first specialty to mandate periodic recertification of its physicians. Required every seven years, recertification involves a cognitive examination and an audit of a sample of office practice records. Significant continuing medical education is also required to keep board certification current. No other specialty requires such a degree of continual updating of medical knowledge and skills.

Family physicians have a long record of being responsive to community needs. Studies have shown that family physicians are more willing than other specialists to hold convenient office hours, make house calls, see emergency patients, and participate in community activities.

Family physicians also are the only specialists whose geographic distribution approximates that of the American population. Each year, about 40 percent of graduates from family practice residencies choose to practice in rural areas, 20 percent in small cities (25,000 to 100,000 population), 20 percent in suburban areas, and 20 percent in larger cities. This distribution has helped significantly to alleviate physician shortages in many underserved communities.

Prepared Statement of C. Everett Koop

It is my intention to approach the question of primary care in light of the increasing crisis in health care delivery in America. Since leaving my post as Surgeon General, I have been cris-crossing the country sharing with audiences, large and small, my concern about the faltering health care system and how it relates to the failing health of a large segment of Americans. I have concluded that there is little that I—or I and a few colleagues—can do to bring about health care reform. It is a daunting task to face runaway administrative costs, substitution of arbitration for the tort system, universal access, restructuring of Medicaid, the application of outcomes research, reassessment of medical ethics—to say nothing of fraud, waste, and abuse.

But there is something that I and a few others can do: prepare medical graduates of the 21st century in such a way that their patients are more satisfied and trusting of physicians and the medical profession in general, and the doctors are more satisfied with the profession and with themselves.

Accordingly, I have joined an effort at Dartmouth Medical School and the Dartmouth Hitchcock Medical Center to face the problem of health care delivery by curriculum change, conceptual changes in the practice of medicine, and through a new focus on pre-medical and medical students alike to turn out a different physician

for the 21st century. Much of what I have to say today reflects the thinking of my Dartmouth colleagues, articulated best, perhaps, by Drs. Paul Gerber, David Smith, and Jonathan Ross.

The satisfaction expressed by recipients of health care in Canada, the United Kingdom, New Zealand, and Australia, I believe, is related not to a superior system of health care delivery but to the number of practicing primary care physicians. These countries have 50 percent (the U.K. has 70 percent); we have 20 percent. This shortage is not good for the profession of medicine; it is not good for patients. The reason is simply lack of applicants for training in primary care.

Before proceeding further, a few definitions are in order. Primary care is provided by general internists, family practitioners, and by pediatricians. The fact that pediatrics is fundamentally a primary care discipline is often overlooked, as is the fact that pediatricians increasingly provide health services to a neglected group of our population—the adolescents of 14 to 21 years.

What is primary care?

- Primary care is medical care that is readily accessible, that is, in an office, clinic, or by phone with the knowledge that if necessary the patient will be seen, and promptly so.
- Primary care is a relationship with the same physician over a long period of time so that the patient benefits from compassionate counsel, a trusting relationship that leads to healing.
- Primary care is certainly comprehensive: Care which is for acute and chronic illness, rational use of technology, the inclusion of complaints which are physical, psychological, and at times socio-economic, the probing of community resources that can be brought to bear on a patient's problem, and, of course, the ethic of preventive care is interwoven in the entire relationship. Some comprehensive care can and should extend to hospitals—usually the site of care considered to be secondary or tertiary.
- Primary care is very personalized care. That means that in addition to all of the above, the primary care physician knows and understands the values of the patient and the family, and his care is adjusted accordingly. Referral to other more specialized physicians is appropriate, but the personal continuum is not sacrificed.
- Primary care and its philosophy is probably what attracted most physicians to the medical profession in days gone by—it does still does but for a diminishing minority of those entering medical school.

Why is this so? Why have the number of applicants decreased? The reasons are many, and it is probably a combination of them that has brought us to the present predicament. Reduced to the most crass terms, the major factors are:

- Low pay—especially if compared to procedure oriented specialists
- Diminishing prestige in the eyes of the public, but devastatingly so in the eyes of the rest of the profession
- The triage-proficient gate-keeper image associated with the primary physician
- Training programs in primary care that do not satisfy the learner, nor bring him in contact with the role models he seeks.

Obviously, more money would make lack of respect more easy to bear, and vice versa. But there are other issues. Quality of life issues such as more time with family, the pressures of long hours of work, the burgeoning elderly population, government interference in the practice of medicine, the diminution of funds for care, are all increasingly as important as are the economic woes.

The over-burdening debt for education carried by many medical graduates does not seem to alter choice of practice, but the method of inquiry may be incorrect. Medical students may deny their debt as an influencing factor, but their decision to practice a specialty can be made several years later when the size of the debt weighed against the likely low income of a primary care physician tips the scale towards specialization. Medical students also begin to see themselves—early on—as either generalists or specialists. That is the first time I have used the word "generalist," and it is the key to my concluding remarks.

The differences between what I have been calling primary care ad the generalist physician really lie in how the our aspects of primary care are emphasized in the theory and practice of medicine.

We have to get away from acute illness-focused medical encounters. The generalist should concentrate on whole person medicine where the clinical sciences have seen their advances in recent years. We need more generalists to treat the illness of patients rather than the diseases which afflict them. We need generalists who

will cater to what patients want, according to their value systems, and not the predetermined values of the profession.

The generalist is not something less than a specialist—he could be something more. He should combine bio-medicine with bio-psycho-social medicine, which is what the public seeks in health care today.

Generalist training could offer eventual tracks which lead to family practice, general medicine, and pediatrics.

If we are to control the skyrocketing cost of health care, we need to get a handle on the partition of generalist versus specialist. Generalists seem able to function adequately as diagnosticians and therapists without resorting to overuse of resources now rather common among specialists.

Much more could be said about the advantages of the expansion of the concept of the generalist as compared to the more confining definition of primary care, but that is probably for another time.

The generalist could lead medicine back to the day when it was humane, self-giving, a profession and not a business, and not lose one whit of science on the way.

Prepared Statement of Philip R. Lee

Mr. Chairman, I am pleased to respond to the Committee's request to discuss issues related to the financing of graduate medical education. The Physician Payment Review Commission began its examination of this issue at the request of Congress in OBRA9O to consider the supply and specialty' distribution of physicians and the financing of graduate medical education. Our deliberations have been guided by congressional concerns that growth in aggregate physician supply and imbalance in the distribution of physicians across specialties, that are partially a result of the system of graduate medical education in the United States, may contribute to the rising costs of care and may present barriers to broader reforms to contain costs and to encourage delivery of more cost-effective and appropriate care.

The structure and financing of graduate medical education is complex and affected by the decisions of private accrediting bodies, program directors and administrators of teaching institutions as well as state and federal governments. My testimony today will primarily consider financing, the area where Congress has in past exerted its influence through payments to teaching institutions under Medicare Part A. My remarks, however, will suggest approaches to financing graduate medical education that go beyond current policy.

The Commission presented its first work related to graduate medical education in our *1992 Annual Report to Congress.* We began by reviewing the major issues that have confronted policymakers over the past twenty years and drawing conclusions that will provide a framework for policy development. My testimony today will begin by presenting those major conclusions. will then move on to describe some of the options that the Commission will be considering this fall as it begins to develop recommendations for its 1993 Annual Report to Congress. We have made a particular effort to look at these issues expansively to help push the policy debate beyond its current impasse towards development of workable solutions.

THE COMMISSION'S WORK TO DATE

Over the past year, the Commission has spent considerable time reviewing background information on physician supply, distribution, and graduate medical education; learning about related public and private sector efforts; examining the impact of previous policy initiatives; and hearing from physicians, policy experts, medical educators, and others knowledgeable in these areas. Based on these activities, the Commission made several general observations in its *1992 Annual Report to Congress.*

First, the number of physicians exceeds, or will soon exceed, that required to meet national health care needs. The number of active physicians has more than doubled since the early 1960s, far exceeding growth in the U.S. population. Many argue that excess supply drives up health care costs, leads to the provision of more unnecessary care, makes it more likely that physicians trained in narrow fields will practice outside their areas of competence, and rarely results in a sufficient number of physicians practicing in underserved low-income rural and inner city areas or entering primary care specialties.

Others argue that an increase in physician supply might have the beneficial effect of creating greater price competition among physicians, improving the availability of care and helping to contain costs. But the market for physicians' services is unlike markets for other goods and services. Price, supply and volume have all been rising simultaneously, suggesting that, at least in the open-ended system in the

United States, physicians have the ability to affect demand for their services and raise prices in the face of increasing supply.

The Commission also assumes that the nation is training too many medical subspecialists and too many specialists in some surgical fields relative to the number of primary care physicians. Several pieces of evidence support these conclusions. First, the United States has a lower proportion of generalists than other Western industrialized nations. Second, this proportion is declining and will continue to drop if the current pattern of medical students' specialty selections persists. Third, the specialty mix in organized systems of care suggest that a more prominent role for generalists may be more effective and efficient. For example, in the largest region of the Kaiser Permanente Health Plan, approximately 45 percent of physicians are in internal medicine, pediatrics and family practice. Nationally, only about 35 percent of physicians are in these specialties.

Declining interest in primary care fields should concern policymakers for several reasons. First, some argue that as an epidemiologic fact, there is insufficient disease in the population to keep many specialists fully occupied in the area of their expertise. Moreover, there is a need for physicians with training to meet the general health needs of the population and who can offer patients continuity of care across time and medical problems. Finally, growth in the proportion of specialists may contribute to excessive growth in health care expenditures. Some of this growth may reflect the fact that payment for physicians' services has undervalued evaluation and management services and overvalued many procedural services, creating strong incentives for physicians to specialize in fields that perform these services. While this, of course, will change for services provided to Medicare patients when the Medicare Fee Schedule is fully implemented in 1996, changes in Medicare payment will likely have a limited effect on medical students' and residents' specialty choices.

The third assumption the Commission made is that many physicians in both primary care and other specialties lack appropriate training experiences to prepare them for practice in ambulatory settings, particularly in the continuing care of patients with chronic conditions and coordination of care for those with complex problems. While most graduate medical education takes places in hospitals, particularly in large tertiary care centers, diagnosis and treatment are being increasingly provided in outpatient settings. Although inpatient training remains a critical part of medical education, residents appear to have too few opportunities to learn about the bread-and-butter of ambulatory care, such as health promotion and preventive medicine, managing chronic disease, making decisions about when hospitalization is necessary, caring for patients after discharge, and developing long-term personal relationships with patients and their families. Changes in the site and content of training are necessary to prepare residents to develop these skills.

Graduate medical education is largely financed through patient care revenues generated by hospitals. This method of financing has been a powerful barrier to changing the site of training and creating a balance between the service needs of hospitals and the educational needs of residents. The federal government is the largest single explicit financing source for graduate medical education through the Medicare program and through its support of residencies in hospitals run by the Departments of Veterans' Affairs and Defense. Other payers have less explicit mechanisms for supporting graduate medical education. Teaching hospital charges to Blue Cross and commercial insurers reflect the direct costs of graduate medical education (for example, residents' stipends) although these payers do not identify and separately pay for them. The Prospective Payment Assessment Commission's (ProPAC) analysis of Medicaid hospital payments indicates that most state Medicaid programs pay hospitals below cost. These programs therefore provide little support for graduate medical education, even when their payment methodologies recognize direct costs.

In Medicare's early years, graduate medical education was funded like other hospital services on a retrospective, reasonable cost basis. With the adoption of prospective, per case payment, new policies were needed to ensure equitable payment for teaching hospitals. The costs of graduate medical education are now recognized under two mechanisms: (1) direct medical education payments to hospitals for residents' stipends, faculty salaries, administrative expenses, and institutional overhead allocated to residency programs; and (2) an indirect medical education (IME) adjustment. The latter is a hospital-specific percentage amount (based on the ratio of interns and residents per bed) added to each DRG payment. The IME adjustment was developed to compensate teaching institutions for their relatively higher costs thought to be associated with teaching, the involvement of residents in patient care, and the severity of illness of patients who require the specialized services available only in teaching hospitals. While both of these mechanisms are important sources of revenue to teaching hospitals, the Physician Payment Review Commission has interpreted its congressional mandate as focusing only on the direct costs of graduate

medical education. Policies related to indirect costs are clearly the responsibility of ProPAC.

Considerably less financing is available for training in ambulatory settings. For example, Medicare recognizes the direct costs of residents' time spent in ambulatory sites only if the hospital "incurs all or substantially all" of the costs of training, creating a disincentive for expanding training to group practices, nursing homes, and other nontraditional sites. Furthermore, even residency programs that seek to expand ambulatory training programs in hospital-owned sites face financial barriers because direct costs are based on historical patterns, rather than current, experience. Finally, Medicare will not pay for indirect costs in nonhospital sites.

CONSIDERING OPTIONS

After reviewing the empirical evidence, the Commission has concluded that despite some small successes, past policy efforts have not achieved the goals of slowing growth in aggregate supply and shifting specialty distribution toward primary care. Indeed, in the past decade, the number of residency positions, particularly in medical subspecialties, has continued to grow.

As the Commission looks ahead to its 1993 report, it will be developing recommendations in a range of policy areas. It will consider options related to financing, sites of training, entry into the physician pipeline, strategies to reduce institutional reliance on residents as low-cost providers of service, and other supportive policies. When considering options in each of these areas, the Commission will be seeking those approaches that: (1) are effective in controlling costs; (2) ensure that the nation trains physicians with the skills and experiences necessary for them to meet the population's health care needs by rationalizing the distribution of training slots, strengthening opportunities for training in ambulatory settings, and encouraging programs that teach residents to be both efficient and effective physicians; and (3) can accommodate teaching institutions in finding new ways to meet their legitimate service needs. In this testimony, I will briefly describe the range of options the Commission plans to consider in the coming months.

Financing

In the area of financing, there is a broad question as to whether graduate medical education should continue to be financed through third party payment for patient care or whether other mechanisms, such as that used to support biomedical research, should be used. While it is attractive to consider other options, financing from patient care appears the most likely to be used in the future.

Assuming that patient care revenues will continue to support graduate medical education, should payments for the direct costs of graduate medical education continue to flow through teaching hospitals? If entities other than hospitals become the principal sponsors of graduate medical education, what sources of financing should support training? And finally, what is the most appropriate method of payment to the entities sponsoring graduate medical education?

To each of these questions, there are several alternatives. For example, in Canada, payments are made not to hospitals but to medical schools. A variant of this approach would be to make payments to medical schools that form consortia with teaching institutions in their regions. Alternatively, payments could be made to residency programs, building on the National Institutes of Health's long-established practice of funding postdoctoral fellows. The Agency for Health Care Policy and Research also follows this practice in funding postdoctoral fellows in health services research. Others have suggested that payments be made directly to residents themselves in the form of vouchers, enabling them to "shop" for a training slot from a variety of competing residency programs.

Then there is the question of the source of financing. For example, a draft report of the American Medical Association's Task Force on Financing Graduate Medical Education argues that the service contribution of residents makes reliance on inpatient revenues appropriate and calls for all third-party payers to adopt Medicare's methodology for paying direct costs. Others have suggested that instead all payers should be required to contribute 1 percent of their payments for medical care into a fund that would be either local, state or national in scope. A public agency (such as a state health department, the Health Care Financing Administration, or the U.S. Public Health Service) or an independent commission established for this purpose would administer this fund by developing priorities for the number and mix of residency positions, setting criteria for acceptable programs, and making grants to programs that are approved for funding. Others have suggested that graduate medical education could be financed by allowing residents to bill for their services (with assignment of their billing rights to a faculty practice plan) and by adding an

additional amount to the fees paid to teaching physicians that recognizes the extra work involved in supervising housestaff.

Sites of Training

As mentioned earlier, there is general agreement that residents, in both primary care and other specialties, need to spend more time in outpatient settings in preparation for future practice outside the tertiary care center. While a number of residency programs provide substantial experience in ambulatory care, broader expansion of such efforts has been stymied by financing policies tied to hospital payment and apparently by the service needs of teaching institutions.

To some extent, decisions about the financing of graduate medical education in general will determine-whether funds can easily flow to ambulatory sites. But there are also specific options to enhance financing. These include changes that build on the basic framework of current Medicare policies such as liberalizing rules for payment of direct and indirect costs, including the costs associated with graduate medical education in calculation of Medicare's payments to health maintenance organizations, and weighting residents enrolled in programs with a substantial commitment to ambulatory training in primary care and other specialties. Other types of options include adding a teaching adjustment to Part B payments made to faculty physicians for ambulatory services and expanding federal grant programs under Title VII of the Public Health Service Act.

The Physician Pipeline

Most projections indicate that the U.S. physician-to-population ratio will continue growing through the year 2020. Policies to stem this growth could be directed at several points of entry along the training pipeline. Because the number of U.S. medical school graduates has been relatively stable over the past decade while the number of residency positions has continued to grow, the Commission has chosen to focus its attention on mechanisms that affect the number and mix of residency positions.

Currently, there are approximately 83,000 residents in training, an increase of 35 percent since 1980.[1] Because there is no single central body that plans, sets standards, or approves the total number and specialty distribution of residency positions, there is no effort to ensure that the number and mix of residency positions meets national health needs. Moreover, there are effectively no limits on the number of potential residents. Hospitals that can meet quality standards set by private accrediting bodies, known as residency review committees, have considerable latitude to use residents both to develop new services and to keep other critical services staffed. Growth of residencies in high-technology and procedural fields may be facilitated because relatively high fees for faculty in these fields can generate clinical income to support additional residents. Some institutions, particularly large inner-city teaching hospitals, have become heavily dependent on residents as a relatively inexpensive source of highly skilled labor. Under the current system, reliance on residents is part of a survival strategy that permits hospitals that cannot afford to hire nonphysician practitioners or staff physicians to continue serving their communities.

Policies to slow growth in residency positions and encourage training in primary care specialties could take several forms. Options that the Commission will consider include: limiting payment to only those residencies filled by graduates of U.S. and Canadian medical schools (close to 20 percent of residents are graduates of foreign medical schools, referred to as international medical graduates); developing weighting formulas to make higher payments for residencies in certain specialties as in H.R. 5502 recently reported by the House Ways and Means Subcommittee on Health; and designating a body to decide the number of residency positions to be funded and to allocate those positions by specialty and geographic areas.

Reducing Reliance on Residents

The continued reliance of teaching hospitals on residents to meet clinical service needs is a major impediment to either reducing the total number of residency positions or incorporating a more substantial ambulatory component into their training. The experience of institutions that have scaled back residency programs in the past suggests, however, that this is possible.

For example, nurse practitioners and physician assistants may be able to provide services on a medical ward, an intensive care unit, or in the operating room that are comparable to those provided by residents. In some circumstances, faculty may actually prefer to work with nonphysician practitioners, who have lower turnover

[1] This growth reflects both growth in the number of first-year residency positions and the increased length of training in many specialties.

and more experience than first and second year residents. But, these practitioners are in scarce supply and command salaries far exceeding those of residents.

A number of options may be appropriate to assist teaching institutions in making the transition. These include expanded support for existing federal programs to train highly skilled nonphysician practitioners, extending graduate medical education funding for a time-limited grace period after scaling down or closing a residency program, and creating a grant program to smooth the transition from reliance on residents to new scheduling and staffing arrangements.

Other Supportive Policies

Finally, just as the Commission has found there are limits to what financial incentives can achieve in changing medical practice, there are limits to what changes in graduate medical education financing policies can accomplish in ensuring that the physicians-in-training are prepared to meet the nation's health care needs. The Commission will consider which other public policy efforts must also be continued and strengthened to meet this goal. These include the National Health Service Corps to bring physicians to rural and inner-city underserved areas, loans and scholarships to recruit minority and disadvantaged students into medicine, and funding for primary care and health services research to support faculty in generalist fields.

CONCLUSIONS

In summary, the Commission will be considering options affecting graduate medical education, physician supply and specialty distribution that include financing, sites of training, entry into the physician pipeline, strategies to reduce institutional reliance on residents as low-cost providers of service, and other supportive policies.

While federal policymakers have long been interested in ensuring an appropriate number and mix of health professionals to meet the nation's health care needs, the debate today has more potential for development of effective solutions than at any time over the past twenty years. In the past, manpower policies were ineffective because they were underfunded, because they had insufficient political support, or because they were undermined by other policies that created incentives in the opposite direction. Now, broader system reform brings the potential of including payers other than Medicare in new financing strategies for graduate medical education and developing new systems of service delivery for those uninsured persons who have had no other source of care besides teaching institutions. In addition, the debate on health care reform provides an important opportunity that was missing in the past to coordinate supply and training policies with those affecting payment for physicians' services, access to care, cost containment, and the overall organization and financing of health care. The Commission will be considering options within this context with the goal of making recommendations to the Congress in its next annual report in March 1993.

PREPARED STATEMENT OF STEVEN A. SCHROEDER

My name is Steven A. Schroeder and I am a general internist and, since 1990, the President of The Robert Wood Johnson Foundation, which in the past 20 years has invested more than $1.3 billion in people and programs to improve health care in the United States.

Central to achieving the Foundation's goals—and many of the other significant challenges in health care today—is assuring the appropriate mix of physicians. But today that mix is not appropriate, for we have too few generalist physicians and too many specialists. Furthermore, without concerted action, the specialty imbalance will only worsen. In my testimony, I describe the extent of the specialty distribution problem, review steps The Robert Wood Johnson Foundation is taking to address that problem, and suggest other possible remedies.

THE PROBLEM

How individual and institutional decisions affect physician specialty distribution in the United States is a complex, mysterious, and uniquely American process. It is not, as one might suppose, a straightforward market interplay of supply and demand. Yet, how physicians are distributed according to specialty has important implications for the medical marketplace—for what kinds of care are given, who receives it and where, and how much it costs.

Compared with other countries, the United States stands alone in the high proportion of physicians who are specialists (and in the correspondingly low proportion

who are generalists). Even more singular is the decentralized, uncoordinated way in which decisions are made about the number of physicians that should be trained in the various specialties. Currently we have about twenty-two practicing physicians per 10,000 Americans, a ratio somewhere below the median for developed countries. In these other countries, from 25 to 50 percent of physicians are specialists, but in the United States the proportion of specialists is upward of 70 percent. (Since the total supply of physicians simply equals the number of generalists plus the number of specialists and since physician supply experts generally agree that in the United States this total supply is now about right, we have equilibrium: more specialists means fewer generalists and vice versa.)

Of course, a benefit of the relatively high proportion of specialists in the United States is the virtual lack of queuing for elective surgery—at least for the well insured. Nevertheless, this benefit must be weighed against the costs of the current generalist-to-specialist ratio. These include the overuse of costly procedures, inadequate access to generalists' services, and excessive medical care expenditures.

At least two prestigious bodies, the Council on Graduate Medical Education and the Association of American Medical Colleges, have urged that the nation work toward having more generalists and fewer specialists. Nevertheless, no national physician supply policy now exists. Indeed, our current public policies contradict themselves: one federal agency does advocate more generalist and fewer specialist physicians, while another provides financial incentives that favor specialists and supports the current residency training system that overproduces them.

The oversupply of specialist physicians presents a problem in the United States for good reason: Americans simply do not have enough health problems to keep all of our specialists appropriately occupied. Low rates of disease and a large capacity to treat it means many instances of too-aggressive care. Our very high rates of expensive, invasive procedures, produce only marginal improvements in health.

Coronary artery bypass surgery is an often-cited example. In 1978, the United States far exceeded any other country in the frequency with which this procedure was performed, with 483 procedures per million citizens. The next-closest country, the Netherlands, performed 150; the United Kingdom, 74; Sweden, 37; and France, 19. In 1990, 1,600 procedures per million citizens, plus more than 2,000 angioplasties per million, were performed in the United States, while in other countries, the rate of increase has been notably slower.

Our nation's investment in the manpower, facilities, and technology to perform this type of surgery—not rates of coronary artery disease—determines our high rate of coronary artery bypass surgery. The United States has many more cardiologists, cardiac surgeons, anesthesiologists, cardiac catheterization laboratories, and cardiac operating suites per capita than do other countries. Similar patterns exist for other high-technology services, such as diagnostic imaging, neurosurgery, treatment for end-stage renal disease, and cancer chemotherapy.

No one can say what the "right" number of various procedures should be, but a growing body of persuasive evidence indicates that between 20 and 50 percent of commonly performed procedures in the United States could be avoided with no harm to the health of the public. Current policy approaches to this problem are only indirect. They focus on pricing interventions (for example, reducing Medicare payments) and on guidelines for surgical interventions. They don't tackle the fundamental cause of our high rate of surgery—too great a capacity to perform it.

Systematic overuse of any costly procedure has enormous financial implications. Each year, we may spend $2 billion or more for unnecessary coronary artery surgery alone. For each unnecessary operation—at over $43,000 apiece—we could pay two full-time home health aides for a year.

Here the issue of equity becomes salient: costly, high-technology procedures are available mostly for people with Medicare or private insurance; low-technology services, such as home health aides, are rarely covered by insurance and many chronically ill people simply can't afford them. Thus, we have achieved a system of elite care for the well insured, while the basic health needs of some 42 percent of our population—the estimated thirty-five million uninsured and seventy-five million underinsured—are in jeopardy.

Another problem with excess specialist capacity is that, to keep busy, many end up serving as part-time generalists. They, their patients, and policymakers, too, may be dissatisfied with the result, because specialists provide more expensive, technology-rich care. Worse, patients are exposed to extra risk. If excess capacity increases unnecessary procedures, then inevitably a certain (usually small) percentage of patients will have needless complications, and some will die.

Meanwhile, a nation awash in specialists has too few generalist physicians, and many of its citizens do not have access to basic health care. While policymakers' current attention focuses on the access problems of the uninsured, people in inner cities

and many rural areas also lack access to generalist physicians. People respond to this in ways that are inefficient and expensive—they use emergency rooms for nonurgent care, or they go without care. They may miss opportunities for prevention and early intervention, as well as for case management of complex medical problems. And, if universal coverge for basic health care ever does come to pass, the resultant surge in demand will surely swamp the generalist capabilities of our current health care system.

The decline in generalism is a function of changes within the practice of medicine and within the "factory" that produces physicians: the academic health center. Whatever the causes of this decline, currently less than 15 percent of graduating medical students express an interest in a generalist career, and that proportion has been decreasing rapidly during the past decade. Dissatisfaction among practicing generalists, which may sway medical students, stems from numerous economic and lifestyle factors.

However, recent studies from several medical centers, supported by data from national surveys, indicate that students' medical school experience is critically important in determining their career choices. The relative absence of generalist role models in medical schools, the undue concentration of clinical training within tertiary care hospitals, the values and biases of the faculty—as reflected in their contacts with students and their decisions on admissions committees—and perhaps the fear of AIDS all contribute to students' decisions regarding which residency program to enter.

At this point, you might ask, why not let marketplace pressures determine students' career choices? There are two reasons not to do so. First, the market is imperfect. In particular, academic medicine (the source of production) is driven by the parochial interests of academic health centers, not by societal needs. Physician payment reform (the price), which is being phased in incrementally, will not have an impact for several years. And, patient choices (demand) regarding care are not made in a conventional way, between competing goods, but instead are greatly influenced and controlled by physicians. Second, the profound negative consequences of an imbalanced generalist-to-specialist ratio warrant active, rather than passive, interventions. Fostering such interventions is a role for both public and private agencies. The Robert Wood Johnson Foundation is pursuing this actively.

PROGRAMS OF THE ROBERT WOOD JOHNSON FOUNDATION

During the next few years, The Robert Wood Johnson Foundation will introduce a number of programs intended to increase the proportion of generalist physicians and decrease correspondingly the proportion of specialists.

The Generalist Physician Initiative—Under this $32.7 million program, medical schools will collaborate with a wide variety of public and private agencies to increase the number of generalist physicians. Each site funded will develop a comprehensive strategy for doing so that involves the entire continuum of training—admissions, undergraduate medical education, residency training, and practice entry and support. Some program interventions must be implemented internally by the schools and residency programs; others will require the collaboration of private insurers, provider institutions, and state governments.

Examples of the kinds of interventions that will be fostered are: scholarship opportunities and debt-forgiveness programs for future generalists; increasing medical students' exposure to community settings and generalist physician role models during the preclinical years; informing medical students and residents about employment opportunities within health maintenance organizations (HMOs) and group practices; working with state governments to create financial incentives for schools to increase the number of generalist residents; developing partnerships with state Medicaid agencies and private insurers to change reimbursement policies that affect graduate medical education; and providing support for practicing community-based generalists, such as night call and weekend relief, and continuing education. Up to eighteen medical schools will be awarded one-year development grants to plan their projects and work out necessary agreements. These schools will then compete for up to twelve six-year, $2.5 million implementation grants.

A total of 83 medical schools applied for grants under this program, including 74 allopathic and 9 osteopathic schools. Interestingly, we have been told informally that several schools that were not selected for site visits have chosen to develop their proposed programs without Foundation funding.

Practice Sights: State Primary Care Development Strategies—This $16.5 million program will challenge states to improve the distribution of primary care providers in medically underserved areas. Organizations with statewide impact (such as government agencies, state universities, or primary care associations), in

collaboration with local community provider groups and health professions schools, will develop statewide models to recruit, retain, and support primary care physicians, nurse practitioners, physician assistants, and certified nurse midwives in medically underserved areas. This program is intended not only to help increase the number of primary care practitioners in these areas, but also to improve financing policies and practice environments to help communities keep their medical personnel.

Generalist Physician Faculty Scholars Program—This program will support the career development of outstanding young faculty in academic departments/divisions of family practice, general internal medicine, and general pediatrics. It will enable a select group of young faculty members to devote a significant portion of their time to research, in addition to their teaching, clinical, and administrative responsibilities.

The four-year, $14.4 million program will provide up to 15 awards annually. Recipients will be required to spend at least 40 percent of their time in research and work with students.

In addition to these programs, the Foundation supports three national efforts to increase the number of under represented minorities in the medical profession. Another program under development would increase private physicians' role in meeting basic health needs of underserved groups.

OTHER EFFORTS NEEDED TO ACHIEVE AN APPROPRIATE PHYSICIAN SPECIALTY MIX

We believe these foundation efforts are important. However, the nation's physician specialty distribution problem can be resolved only by a concerted national effort involving both government and the private sector. As a start, both sectors must acknowledge the importance of the issue and pledge their efforts toward its resolution. Absent such leadership, reversing the current trend will be impossible.

To be effective, specific solutions must target both the settings in which generalists practice as well as the system of undergraduate and graduate medical education that influences career decisions. We could improve the practice of generalism by enhancing its prestige within medicine; reducing payment disparities that disproportionately reward the use of medical technology, as the Resource Based Relative Value Scale (RBRVS) was intended to do; and experimenting with other incentives, such as selective loan forgiveness, malpractice premium discounts, and enhanced Medicare and Medicaid payment for generalists. It goes without saying that we also need to stop the inexorable escalation of health care costs. Currently, the greatest burden for controlling costs has been placed squarely on the shoulders of office-based practitioners, especially generalists. These cost-control efforts are unsuccessful in part, I believe, because generalists are not the main source of the problem.

Other incentives could be targeted at academic medical centers, which could be reminded of the public trust inherent in their educational mission—to provide physicians to meet the nation's or their state's workforce needs. Students could be made more aware of the many employment opportunities available for generalists nationwide, especially in the burgeoning HMO sector. The graduate medical education establishment could be prodded to train more generalists by analyzing what really happens to the billions of public and private dollars earmarked for residency training at our teaching hospitals; by scrutinizing the graduate medical education programs of our Veterans Administration hospital system; and by reviewing the current practices of residency accreditation and review committees, as well as the extent to which real or imagined antitrust barriers stand in the way of necessary changes in the distribution of residency positions.

Perhaps it will be neither politically nor socially feasible to stimulate such changes, to encourage more generalist and fewer specialist physicians. Or, perhaps these interventions could be tried and found to be insufficient. If so, it may be time instead to drastically reduce the number of U.S. medical student graduates, as well as the number of specialty residency slots, Such a cut might reduce the current level of just under 16,000 graduates per year to 10,000 or 12,000. Without such a draconian effort to reduce the number of specialists, I hear that the United States will never be able to control the rising costs of health care.

Changes in physician supply policy take many ears to be felt, but they have long-term implications, Like the insidious erosion of the ozone layer, the excess of specialists and the shortage of generalists in our country have come about slowly and without fanfare. The consequences, however, are profound, This generation must safeguard the future of our health care system for the generations that follow by bringing the nation's mix of physicians back into balance with its health care needs.

PREPARED STATEMENT OF WILLIAM TOBY, JR.

Mr. Chairman and Members of the Subcommittee: I am happy to be here to discuss efforts within the Department that are aimed at improving access to primary care services and increasing our nation's supply of primary care physicians.

Secretary Sullivan has been an outspoken supporter of primary care providers and an advocate for primary care and preventive services. Both the Health Care Financing Administration (HCFA) and the Public Health Service (PHS) are pursuing a range of initiatives to promote primary care medicine. However, the Secretary is concerned that we are falling short in our efforts. We need to provide stronger incentives to increase the number of medical students pursuing careers in primary care and to improve the availability of alternative training settings that emphasize primary care medicine. To this end, we have been working closely with PHS to examine options for advancing primary care.

Although HCFA and PHS play a significant role in supporting medical education, there are many others who are important to these discussions. The education and training provided by medical schools and teaching hospitals is also supported by other third-party payors, private research foundations, charitable organizations, as well as, State and local governments. They also have an interest in improving the supply of primary care physicians to meet the basic health care needs of individuals.

DEMAND FOR PRIMARY CARE PROVIDERS

First, I would like to speak more broadly about the need for primary care physicians and other practitioners in our health care system. This should be a critical component of discussions on health care reform and the future of our health care system.

Reform that is designed to increase access to health care insurance will only be effective if providers who can deliver high quality, cost-effective health care are available. In a country that is increasingly stressing "high-tech" medicine, primary care physicians provide the needed first-line, one-on-one medicine, helping to ensure that our citizens receive appropriate levels of quality care, while promoting preventive services for healthier futures.

While the health care system, in general, is moving increasingly toward coordinated care, the President's Comprehensive Health Care Reform Program would provide even stronger incentives for development and expansion of coordinated care systems. In most cases, these systems feature primary care physicians as the coordinators of care received and resources used. For instance, health maintenance organizations (HMO) place a great deal of emphasis on primary care providers—nearly 50 percent of HMO physicians are primary care physicians.

Expanded access to health care services and the increasing use of coordinated care therefore highlight an important issue facing the capacity side of our health care system: a declining number of physicians who are choosing primary care as a specialty. Although the overall number of active physicians has grown from 468,000 in 1980 to 615,000 in 1990, we have seen a declining proportion of primary care physicians over the last 25 years—from 42 percent to about 34 percent of the total physician work force. In 1989, only 39 percent of residency positions were in primary care—down from 45 percent in 1980.

We believe that primary care physicians may be an effective cost-containment strategy. Research indicates that care provided by primary care physicians may be less costly than that of specialists, even when caring for similar patients. Studies indicate that primary care physicians tend to hospitalize patients less often and to order fewer medical test, procedures, and prescription drugs. A major medical outcomes study recently published in *The Journal of the American Medical Association* confirms earlier findings that even after adjusting for patient case mix, hospitalization rates were from 50 to 100 percent higher for patients cared for by specialists than for family physicians. For prescription drugs, the study also found that the rate of utilization was significantly higher for specialists.

Therefore, an inadequate supply of primary care providers may threaten our ability to achieve meaningful health care reforms, including: improvements in access to health care; reductions in the growth of health care costs; increased use of coordinated care systems; and expanded use of preventive care services.

CURRENT PRIMARY CARE ACTIVITIES IN HCFA AND PHS

Within HCFA and PHS, there are a variety of ongoing efforts that are aimed at improving access to primary care services and increasing our nation's supply of primary care physicians. I would like to briefly touch on some of these efforts.

Health Care Financing Administration Activities

HCFA programs, to a great extent, focus on financing mechanisms that improve access to and payments for primary care services, especially for services delivered in rural and other underserved areas.

Medicare Physician Payment Reform—A major goal of Medicare physician payment reform was to implement a physician fee schedule based on the resources physicians actually use to provide service and to set the right relative prices for physician services. The fee schedule corrects historical payment imbalances by redistributing Medicare payments across types of services and geographic areas. The fee schedule will be fully phased in by 1996.

In general, general practitioners, family practitioners, and internists will receive larger total increases in Medicare payments compared to surgical and other procedural specialists. On average, family physicians are expected to receive a 16-percent increase in their 1992 Medicare revenues compared to what they would have received under the old payment system. By 1996, family physician Medicare revenues will be, on average, 30 percent higher than revenues under the old payment system. The geographic adjustment in the fee schedule also tilts payments toward low cost areas and rural areas.

Health Professional Shortage Areas Incentive Payments—Since 1989, Medicare; has provided a bonus payment to physicians who practice in designated health professional shortage areas (HPSAs). The incentive payments are an add-on to the fee schedule payment amount and are intended to encourage providers to remain in shortage areas.

The HPSA incentive payment program was expanded for services rendered after 1991—remaining rural and all urban HPSAs were added and the bonus payment was increased from 5 percent to 10 percent. Between January and March of 1990, Medicare spent only $750,000 on incentive payments to physicians. Yet for the same quarter in 1991 and 1992, Medicare incentive payments were $2.5 million and $11 million respectively. We expect to spend about $50 million annually on HPSA bonus payments.

Although these payments are not targeted to primary care physicians specifically, it is generally believed these HPSA incentive payments benefit primary care physicians in particular.

Physician Assistants and Nurse Practitioners—In an effort to increase the availability of primary care services in certain settings and in rural areas, Medicare reimburses for services furnished by non-physician practitioners. For example, in certain cases, services furnished by physician assistants can be billed by the employer and paid by Medicare, while nurse practitioner services provided in nursing facilities can be billed separately. Nurse practitioners and clinical nurse specialists can bill directly for services provided in rural office settings.

Rural Health Clinics and Federally Qualified Health Centers—Medicare and Medicaid also pay for services delivered in alternative settings providing primary care services to underserved areas. Rural health clinics are reimbursed for outpatient services including services of physicians, physician assistants, nurse practitioners, nurse midwives, visiting nurses under certain conditions, clinical psychologists, and clinical social workers. Federally qualified health centers (FQHCs) can be reimbursed for primary care services, including preventive services, by Medicare and Medicaid.

Medicaid Primary Care Case Management—State Medicaid programs have been actively pursuing improvements in the provision of primary health care services. The Primary Care Case Management (PCCM) programs, which operate under waivers from the Federal government, are among the fastest growing component of Medicaid coordinated care. The PCCM program has shown cost savings while improving access. In these programs, each participating Medicaid recipient has a primary care physician responsible for providing or authorizing all non-emergency services.

This arrangement provides each Medicaid recipient with a "family" physician who helps coordinate the care needed. The PCCM program saves money by discouraging use of expensive emergency rooms for routine care. It provides an excellent example of how reliance on primary care physicians can yield a "win-win" situation.

Public Health Service Activities

PHS operates a wide variety of programs to support the training of health professionals and to enhance the provision of health care in rural and inner-city underserved areas.

National Health Service Corps—For example, one familiar program operated by PHS is the National Health Service Corps (NHSC). The NHSC's purpose, by statute, is to provide primary care health services in HPSAs. In exchange for service commitments, the NHSC awards scholarships to students who seek careers in primary

care, enters into loan repayment agreements with providers who are ready to begin service, and supports State loan repayment programs. In fiscal year 1991, there were 160 participants in the NHSC loan repayment program with awards exceeding $11.3 million.

Community-Based Scholarships—In a similar program, the Community-Based Scholarship program, grants are provided to States who then make awards to community organizations in HPSAs. The awards are used for scholarships to individuals who agree to serve in those HPSAs upon completing their health professions training.

Minority/Disadvantaged Assistance—The Minority/Disadvantaged Health Professions programs help support institutions and faculty that train minority/disadvantaged students and the students themselves. These programs help increase the number of minority students pursuing health careers; minority students are thought more likely to pursue primary health careers and to settle in underserved areas.

Support for Primary Care Delivery—PHS also provides support for Community and Migrant Health Centers, a source of comprehensive primary and preventive health care services for many of the nation's medically underserved.

Barriers to Expanding the Number of Primary Care Providers

Despite these efforts, the proportion of primary care physicians in the physician work force is decreasing and the number of students entering primary care residencies has declined. Some suggest that disparities in income and prestige and the trend of medical schools toward specialty training discourage students from pursuing primary care training. Medicare medical education payment policies also tend to encourage hospital-based training.

Huge disparities exist between the income of primary care physicians and specialists. Family physicians crossed the $100,000 average annual income mark in 1990, but continue to earn less than surgeons and anesthesiologists, who have average incomes of $236,000 and $200,000 respectively. In fact, one quarter of all family physicians earn less than $65,000 a year. The new physician fee schedule under Medicare will tend to reduce these disparities, but it will not eliminate them.

Medical schools and teaching hospitals also have little incentive to focus training programs to primary care medicine. Medical schools tend to emphasize specialty training partly for financial reasons. Medical schools reward and recruit specialty faculty because the schools are highly dependent on specialists for essential revenue.

Although estimates vary by school, most medical schools derive at least 40 percent of their revenue from patient care revenues, with a significant amount generated by faculty practice plans. Specialists tend to generate higher patient care revenues, leading medical schools to rely on specialty faculty and to emphasize associations with specialty training programs. In addition, nearly 20 percent of medical school income is derived from biomedical research grants. Again, these grants strongly favor the skills and interests of specialists.

FUTURE APPROACHES TO IMPROVE INCENTIVES

The incentives that are now in place in our health care system have to be reworked in order to increase the flow of medical students into primary care. While the new Medicare physician fee schedule will help make primary care more attractive financially, changes in education and training are also necessary if we are to make progress toward a work force that can fulfill national needs.

The Department has been actively investigating other options for achieving a realistic and sound mix of primary care physicians and specialists in this country. HCFA and PHS co-sponsored the National Primary Care Conference in March 1992 that looked at the integration of primary care service delivery, training, education, and financing. The conference contributed to discussions on how to improve the pool of primary care practitioners.

The Secretary, in his 1992 recommendations to Congress on Medicare physician fee schedule, mentioned four broad approaches that we are looking at in terms of enhancing primary care. These included: accelerating the fee schedule transition; modifying the physician Medicare volume performance standard; emphasizing primary care training through Medicare graduate medical education payments; and strengthening the focus on primary care in PHS programs.

We are evaluating each of these approaches and are in the process of getting input from physician groups and other interested groups.

Graduate Medical Education

Our desire to reform Medicare's graduate medical education (GME) payment policies is ongoing. The President's health care reform plan calls for reshaping GME

payments to teaching hospitals to encourage the training of more primary care physicians. In recent years, HCFA funded several studies and, in May 1991, HCFA sponsored a conference on restructuring the GME program and payment methodologies.

GME payments cover the cost of medical training attributable to Medicare, including resident and faculty salaries and fringe benefit. In fiscal year 1993, Medicare will spend approximately $1.6 billion on total GME payments, $1.2 of which was spent on physician training. However, GME payments are made only to teaching hospitals, which tend to provide high-cost, high-tech care.

Over the past several years, HCFA has sought the legislative authority to reorient payments for GME to emphasize primary care training. In calculating GME payments, the President's fiscal year 1992 budget proposed weighting primary care residents at 240 percent of the per resident amount, weighting non-primary care residents in their initial residency period at 140 percent, and weighting non-primary care residents beyond the initial residency period at 100 percent. We believe it is critical that teaching hospitals and medical schools get the message that the nation needs to train more and not fewer primary care physicians.

Another alternative to the current system might be to make GME payments directly to non-hospital ambulatory facilities, such as health maintenance organizations, physician group practices, and community health clinics. Not only are these facilities appropriate settings for training primary care physicians, they could also provide more training opportunities to non-primary care physicians.

Although the Medicare program is an important contributor to medical education, other third party insurers are also responsible for funding the training of physicians in this country. Medicare pays for approximately 30 percent of the total cost of graduate medical education. Therefore, other payors should evaluate payment policies in order to restructure medical education incentives to be more in accord with national needs and national goals.

CONCLUSION

We believe that primary care physicians are the foundation of a sensible and workable health care system: they have the broad-based training necessary to deal with a wide array of common medical problems in a comprehensive and coordinated fashion. Primary care physicians are needed to improve access to high-quality and affordable health care services now and in the future.

We believe that properly designed incentives in the system will improve the proportion of primary care physicians to specialists. We will continue to work with the Subcommittee and other concerned groups to pursue initiatives that will provide us with an adequate supply of primary care physicians to meet the needs of our citizens.

Prepared Statement of W. Donald Weston

INTRODUCTION

West Virginia is experiencing a grassroots organizing renaissance in its small rural communities, its institutions, its government, and its university health sciences programs. While this renaissance is creating an environment for change, and bringing together many different groups, there is still much work to be done.

The renaissance is being driven by a philosophy of sharing among disciplines, health care providers, health sciences schools, and most importantly, among small rural communities. This mode of sharing and collaboration has one focus: to improve the health care delivery system of rura! West Virginia.

West Virginia is second in the nation's rural population who reside in towns of under 10,000. This very mountainous state has the highest number of unincorporated communities in the nation, leaving a large percentage of the population governed by a county level government. The geography and topography of the state has resulted in very isolated rural areas. Forty-four of West Virginia's 55 counties carry some level of designation as a "health professions shortage area."

To address this problem, the state has taken some very bold and innovative initiatives which capitalize upon the growing collaborative philosophy. These initiatives, specifically the Community Partnerships Project funded by the Kellogg Foundation, the Rural Health Initiative (Caperton Plan) funded by the West Virginia Legislature, and the federally funded Health Education Training Centers of Southern West Virginia, are creating 14 rural health education centers and networks across the state involving over 120 potential training sites. These training networks are being designed to increase the retention rate of health professions in rural areas of the

state. With these and other similar initiatives, West Virginia has the potential to become the leader in rural health professions training in the nation.

These initiatives directly link small rural communities with the office of the vice chancellor and the health sciences schools. The Governor and West Virginia Legislature have an unquestionable commitment to this process and to improving rural health care. Significant curricular changes are being made to improve the relevance of training in rural practice settings and communities are involved in this curriculum development process. Within two years, all health sciences students within the University System will be required to complete some portion of their training in a rural area of the state: All students will have specific requirements to dedicate time to local community activities as part of their training. These training activities will be developed and directed by the communities which serve as training sites for the students. In this way, students will gain a richness in their education which cannot be duplicated on campus or in the laboratory.

This statewide network of rural health education was launched by three separate initiatives—the Kellogg Community Partnerships Project, the Rural Health Initiative (Caperton Plan), and the Health Education Training Center Project. The intent, when fully operational, is that they will function as a common integrated program though having varied funding sources. However they all have a common set of goals and objectives as detailed below:

1. To integrate health care, teaching, and research in a community setting.
2. To meet the needs of the community's medically underserved population.
3. To identify students who may interested in health careers.
4. To promote collaboration with a variety of health professions schools, and establish an interdisciplinary training component to broaden the learning experiences of the disciplines.
5. To provide health promotion as an approach to change in community behaviors which contribute to health risk factors.
6. To involve significant community participation and enhance the role of the community citizen by encouraging leadership to solve social, economic, and other problems found in the community.
7. To increase the retention of health professions through continuing education, computer access and training, and faculty development activities.

COMMUNITY PARTNERSHIPS: A KELLOGG INITIATIVE IN HEALTH PROFESSIONS EDUCATION

In June 1991, a $6 million, four-year grant was awarded to the University System of West Virginia by the W. K. Kellogg Foundation. The main goal of the Kellogg Community Partnerships Project is to transform primary care centers in rural, medically underserved areas into academic training centers for education, research, and medical service, thereby enhancing the primary care services in those areas. An additional goal is to acquaint medical school students with rural community health care and its unique rewards, and to encourage these students to continue practicing primary care medicine in the state upon graduation. The Community Partnerships initiative will help redirect health professions education by creating community-based teaching centers.

The project involves the collaborative efforts of the state's health science schools. A curriculum is being developed common to all disciplines and schools, which will consist of a problem-based learning format with multidisciplinary teams of students in medicine, nursing, pharmacy, dentistry, and in one site, physical therapy. This common curriculum will become the curriculum used in all training sites in the state, varied only by the application to specific needs in any given site with specific subsets of learning experiences for the unique requirements of the individual disciplines.

The Kellogg Project is governed by a Joint Governing Board consisting of the deans of the seven health professions schools, and nine community members; three from each of the current sites. The chairperson of the Board must always be a community member and the Board can be made up of no less than 51% community members.

Three primary care centers were chosen in the first year. At least 25 students comprise the first multidisciplinary teams that have begun work and training at the centers in July of this year. Two additional sites will be chosen by the fourth and final year of the grant, with at least 45 students participating by the third year, and a minimum of 60 students participating in the final year.

THE CAPERTON PLAN: THE RURAL HEALTH INITIATIVE

On October 18, 1992, during a special session of the West Virginia Legislature, Governor Caperton signed into law the Rural Health Initiative Act of 1991, also known as the Caperton Plan. The passage of this bill is a major effort from the state to remedy many of the health care problems existing in West Virginia. The purpose of the Rural Health Initiative (RHI) is to increase access to health care for West Virginians, especially for those in rural areas, by improving the education, placement, and retention of health care professionals.

The Rural Health Initiative (Caperton Plan) is funded by the state with $6 million annually. Of the $6 million, $4 million will be added to the base budget of the medical/health sciences schools. The remaining $2 million is to be used for establishing health care education centers in rural sites.

The RHI is governed by an 18 member Advisory Panel, with final decisions being made by the Vice Chancellor of Health Sciences and the University System of West Virginia Board of Trustees.

In May of this year, eight health care centers, from widely diverse areas of the state, were selected as rural health education sites. Of the eight lead agencies, five are primary care centers and three are rural hospitals. The number of members of the selected consortia range from four to 30 different organizations and cove; a total of 38 counties. Among the 113 member organizations, 16 are hospitals, 26 are primary care centers, 7 are behavioral health centers, 10 are county health departments, 8 are private physicians, 16 are social service agencies, and the remaining are categorized as other health providers.

THE HEALTH EDUCATION TRAINING CENTERS (HETC) TRAINING NETWORK

The Health Education Training Center Project of Southern West Virginia (SWVHETC), is a non-border state initiative located in five southern West Virginia counties. This project is funded by federal grant monies received due to the documentation of need for improved health care services in the community and the evidence of community involvement in the implementation of the project.

The rural, appalachian environment provides a learning laboratory to develop a model for training medical and health professions students. Students have an opportunity to focus on the real health problems of these communities. The essence of the project is to give the community the decision-making tools to articulate its needs. Then the medical and health sciences schools can design and deliver a legitimate learning experience which will benefit both the student and the community.

This project is currently in its second year, operating smoothly and on schedule. At the time of this report, medical students involved in this program are in a one-month orientation to community health practice, demonstrating the benefits of rural, primary care. The orientation consists of a rotation of students in the five counties served by the SWVHETC; and the purpose of this experience is to provide basic skills to students for application to both community and clinical experiences for maximum learning.

CURRICULUM

In the first two years, all of the students will have new educational experiences related to rural health education programs, as follows:

1. Team decision making
2. Rural research models
3. Health care economics
4. Community health
5. Appalachian culture

Following is a general brief overview of the educational experiences in the rural sites:

A. Clinic

1. Students will work in a multidisciplinary clinical environment. Under the supervision of the field professor and preceptors, each student will develop skills and attitudes consistent with seeking and receiving contributions from nurses, physician's assistants, office staff, public health officials, and other health professionals, as well as from any other source of potentially useful information. Training in the assessment and evaluation of input will also be stressed.

2. Students will participate in daily conferences in which individual cases will be discussed and evaluated. These conferences will stress a multidisciplinary, team-based approach to health care assessment combined with the development

of appropriate preventive and therapeutic approaches to the case and the community.

3. Students will participate in didactic presentations of topics in appalachian culture, team decision making, community-based research, community medicine, and medical economics.

B. Community (Off-Clinic)

1. Students will participate in service activities in the community in conjunction with other health professionals. Tasks such as patient education, health assessment, and patient follow-up will be conducted.

2. Students will participate in research activities focusing on community health assessment, epidemiology, etc., as developed by the multidisciplinary teams.

C. Allocation of Time

1. *Educational:* Approximately 50% of time will be devoted to discipline-based clinical education. This will occur in a multidisciplinary environment and will involve interactions with the other disciplines. Therefore this time may also be considered as multidisciplinary in nature.

2. *Service:* Service activities include patient education, health assessment, community outreach and others as identified by clinic and community representatives. One to two half days will be allocated each week for service and research related activities. Service activities may also be performed at the clinic. These activities will be conducted by preceptors and students from all disciplines.

3. *Research:* Research activities will be developed in cooperation with clinic and community representatives. Such activities should lead to an identification or resolution of community health concerns. Research activities will be conducted by preceptors and students from all disciplines.

LEARNING RESOURCE CENTERS

In each of the training networks, Learning Resource Centers (LRCs) will be developed which will provide computer links for students and field professors to the universities, various databases, and the databases in the state's health department. Educational and patient care data will be linked so the network can be used for outcome research and on-going patient education.

FACULTY AND STAFF

All of the health education centers will have a full-time site coordinator, who will coordinate all the usual student scheduling and student affairs type activities for each center. Funds are being made available for the hiring of field professors in each discipline to be jointly selected by the faculty of the appropriate disciplines and the community boards. They will be based full time in the community sites. These field professors will have faculty appointments in the appropriate departments and be based in the community full time.

The program calls for the placement of residents in the rural health education sites both as educational experience for them and to serve the usual resident educator role. At the present time, we are still struggling with a mechanism to fund this because of traditional reimbursement patterns for residency training being closely linked to the hospitals rather than atypical off-site educational centers.

PARTICIPATING STUDENTS

The University System programs are comprised of: (1) West Virginia University, with the disciplines of medicine, nursing, dentistry, and pharmacy; also a nurse midwifery program to be located at the Charleston extension branch; (2) Marshall University, with the disciplines of medicine and nursing; and (3) the West Virginia School of Osteopathic Medicine.

Current levels of student enrollment in all disciplines from all schools are:

Medicine:		**Nursing:**	
1st year	207	1st year	173
2nd year	200	2nd year	194
3rd year	201	3rd year	168
4th year	179	4th year	157
Total	787	Total	692
Dentistry:		**Pharmacy:**	
1st year	41	1st year	81
2nd year	31	2nd year	82
3rd year	33	3rd year	79
4th year	31	Total	242
Total	136		

This comes to a grand total of 1,857 main discipline health professions students currently enrolled in the state.

COMMUNICATIONS

STATEMENT OF THE AMERICAN COLLEGE OF PREVENTIVE MEDICINE

PREVENTIVE MEDICINE

Preventive medicine is an autonomous medical specialty recognized by the American Board of Medical Specialties. It encompasses general preventive medicine and public health, occupational medicine, and aerospace medicine. Specialists in preventive medicine are uniquely trained in both clinical medicine and public health. They acquire the skills to understand the causes of disease, disability and premature death in both individuals and population groups. The distinctive aspects of preventive medicine include knowledge and competence in epidemiology, biostatistics, environmental and occupational health, behavioral medicine, health administration, and clinical preventive medicine.

Postgraduate training in preventive medicine consists of a three-year program. In the first year, the resident undergoes general clinical training involving direct patient care. The second and third years consist of academic work leading to a master's degree in public health or the equivalent and supervised field work in a variety of placements. A fourth year of work experience is required for board eligibility.

The American College of Preventive Medicine (ACPM) is the national medical specialty society of physicians whose primary interest and expertise are in disease prevention and health promotion. Members and fellows of ACPM work in public health and community agencies, in primary care settings, in industry, and in academia.

SUPPLY OF SPECIALISTS IN PREVENTIVE MEDICINE

The national shortage of physicians specializing in preventive medicine is well documented. Such a shortage was forecast initially in 1980 by the Graduate Medical Education National Advisory Committee (GMENAC). GMENAC projected a need for 7,300 preventive medicine specialists by 1990. In 1991, the American Board of Medical Specialties reported a total of 3,678 physicians board-certified in preventive medicine. This represents a 50% shortfall in supply.

The 1990 HHS Report to the President and Congress on the Status of Health Personnel in the U.S. reiterated the concerns about preventive medicine stated in the 1986 report. The 1986 report stated, "The shortage of physicians . . . opting for advanced public health training is a major issue. Their scientific and technical backgrounds when coupled with graduate preparation in the public health sciences uniquely qualifies them for leadership in practice, research and faculty roles identified as being in short supply." The 1988 Institute of Medicine Report on the Future of Public Health noted a widespread need for public health professionals who possess both technical expertise and training in management and community diagnosis and organization. The Institute of Medicine Subcommittee on the Physician Shortage in Occupational and Environmental Medicine concluded that there is a current shortage of 1,600 to 3,500 fully trained specialists in that field, as well as a shortage of 1,500 to 2,000 primary care physicians with special competence in the field. Most recently, the Council on Graduate Medical Education (COGME) reconfirmed the continuing shortage in the July 1992 draft of its third report.

AVAILABILITY OF TRAINING IN PREVENTIVE MEDICINE

In 1990–91 there were a total of 78 accredited preventive medicine residency programs, including four new programs accredited in 1990. These include 45 in general preventive medicine/public health, 30 in occupational medicine and 3 in aerospace medicine. Next year the number will be reduced, because two general preventive medicine/public health programs have shut down for lack of funding, and at least two more have determined that they will close after this year. These closures will

bring the total number of programs back down close to the 1978–79 level of 73. Several other programs, particularly those based in state or local health departments, perceive themselves to be in serious jeopardy.

Lack of funds to pay residents' stipends is the single biggest obstacle to growth in preventive medicine training. In 1989, residency programs anticipated a capacity to train about 754 residents in 1990–91. However, funding to support residents was expected to be available for only about 64% of program capacity. Yet, the residency programs reported a large pool of qualified applicants from which to choose. Many programs discourage potential applicants because they know how few positions will be funded.

Preventive medicine residency programs piece together funding for residents from multiple sources, including department funds, military or federal programs, private foundations, community agencies, research grants, scholarships, and employer reimbursement. Most of these sources are volatile and uncertain from year to year. Residency programs scramble annually to put together funding packages for their residents. Their ability to accomplish this has diminished as the state, local and private funds used for this purpose have grown more and more scarce.

Federal support for preventive medicine residencies under Title VII of the Public Health Service Act has been chronically underfunded. The fiscal year 1992 appropriation of $1.65 million represents no increase from the level of the previous five years. The current appropriation supports only 33 residents in 13 programs. Medicare reimbursement for direct and indirect graduate medical education costs is largely unavailable because the second and third years of training are usually not hospital-based.

THE WORK OF GENERAL PREVENTIVE MEDICINE/PUBLIC HEALTH PHYSICIANS

In 1991, Battelle, an independent consultant under contract to the Centers for Disease Control and the Health Resources and Services Administration, conducted a national survey of 1,070 graduates of the general preventive medicine/public health residency programs from 1979–89. The responses of 797 (75%) of these graduates documented the activities of preventive medicine physicians in this specialty area.

The survey found that preventive medicine specialists have a strong record of leadership and accomplishment in public health, and in contributing to the *Year 2000 Health Objectives for the Nation.* Almost one-quarter had initiated programs in infectious disease prevention and control; 21% had initiated programs in AIDS and sexually transmitted diseases; 18% had initiated programs in chronic disease prevention. One-third manage programs in public or community health, handling average budgets of $22 million and supervising an average staff of 160. More than half (59%) also engaged in research in disease prevention and health promotion. The study also found that graduates remain committed to the field; 90% were involved in public health or preventive medicine.

Preventive medicine specialists also are active in direct patient care. Nearly 70% of graduates were involved in patient care, spending from one-quarter to one-third of their time in this activity. Of these, about 80% practiced primary care and/or clinical preventive medicine.

The work settings in which preventive medicine graduates were found varied greatly, and included state and local health departments, the military and other federal agencies, medical schools, schools of public health and other university settings, hospitals, public clinics, and private practices (usually family practice).

It is noteworthy also that minority representation in preventive medicine exceeds national averages for physicians. A survey conducted by ACPM covering the 1991-92 program year showed that 44% of preventive medicine residents were women and 18% belonged to an underrepresented minority.

REFORM OF GRADUATE MEDICAL EDUCATION FINANCING

The training of physicians in preventive medicine recognizes that the practice of prevention embraces both personal health and public health measures. There has long been a dichotomy perceived between personal health and public health services. Activities aimed at population groups have been perceived to be almost exclusively the province of public agencies. Personal health services are perceived to be the job of individual and institutional providers. This dichotomy, however, is no longer valid. The Institute of Medicine's 1988 report, *The Future of Public Health,* noted that a major function of public health agencies is to assure the availability of personal health services, especially to high-risk populations. The role of public health agencies as developers and direct providers of primary care services is increasing. On the other side of the equation, generalist physicians who practice community-

oriented primary care recognize that they can play an important role in organizing and carrying out local population-based health measures.

The system for financing graduate medical education must be structured to support preventive medicine's broad-based training in both clinical medicine and public health. One essential element of such support is to pay for the costs of graduate medical education in ambulatory settings, where most preventive medicine training takes place. These settings include outpatient clinics, public health departments, community and migrant health centers, and health maintenance organizations. The time that residents spend in learning and conducting population-based health measures, such as disease surveillance, epidemiologic research, and planning, managing, and evaluating community programs in prevention, should be reimbursable in the same fashion as direct patient care.

A second important element in promoting training in preventive medicine is to accord preventive medicine residencies that same increased weighting in calculating Medicare direct medical education costs that has been widely advocated for primary care specialties in short supply. In the case of preventive medicine, the initial purpose of such favorable treatment is not to encourage more physicians to enter residency programs. Rather, it is to provide funding for those physicians who wish to enter preventive medicine but have been wholly precluded from doing so by the prospect of foregoing a salary during the residency.

CONCLUSION

The financing of medical education in the United States is a complex system that has contributed to undesired results in the supply, distribution and specialty mix of physicians. Reform of Medicare financing is an important element in the solution, but the participation of all concerned parties, including medical educators, public and private insurers, and health care providers, will be necessary to construct a rational and economic system. ACPM urges that consideration of reforms include a recognition of the demonstrated need for more physicians trained in preventive medicine and the distinctive characteristics of training and practice in preventive medicine.

Statement of the American College of Rheumatology

The American College of Rheumatology (ACR) is taking this opportunity to provide the Senate Finance Subcommittee on Medicare and Long-Term Care with a statement for the record of the hearing, July 29, 1992 on how Medicare payment policies affect physicians' choice of medical specialties. ACR is the national organization of rheumatologists, both physicians and scientists, dedicated to the prevention, treatment, and eventual cure of the more than 100 types of rheumatic diseases.

A rheumatologist is an evaluation and management (EM) oriented primary care physician subspecialist of internal medicine. We provide medical care to patients with rheumatic diseases which affect not only bones, joints and muscles, but also the immune system, heart, lungs, gastrointestinal tract and kidneys. Osteoarthritis, rheumatoid arthritis, gout, systemic lupus erythematosus, bursitis, and osteoporosis represent some of the disorders seen in a rheumatology practice.

These diseases affect more than 37 million people in the United States, and are the leading cause of disabili' ı ε ·d absenteeism in the workplace. With special training and expertise, rheumato. ıgı. ts are uniquely qualified among physician specialists to provide high quality medical care to people with rheumatic disease in a cost-effective manner, and to lead the team of health care professionals who assist in treating and caring for people with these disorders.

Care for people with arthritis and related diseases often calls for detailed medical histories and physical examinations; consultations with referring physicians; multiple phone calls; interpretation of clinical laboratory results; monitoring of multiple and complex drug therapies; review of X-rays, CT scans, and MRIs; recommending and implementing physical therapy programs; and educating both patient and family. In addition to providing disease treatment and management to patients with rheumatic disorders, it is not uncommon for many rheumatologists to also serve as the general internist/primary care physician to their patients.

Unlike, procedure-oriented medical subspecialties, rheumatology faces series manpower shortages both in the present and future. According to the most recent study, there were 3200 rheumatologists in 1990 of which 2620 were providing direct patient care. Yet, the "needs-based" model employed in this study showed that 5619 patient care rheumatologists were needed in 1990; 6466 by the year 2000, and 7392 by 2010[1]. The current and future trend in rheumatology manpower shows that there is and will continue to be less than half of the amount of rheumatologists required to meet the nation's patient care needs. Certain Medicare policies and other programs should be encouraged and developed immediately to narrow this gap.

Although there are many reasons why physicians enter certain specialties in medicine, there is no doubt that monetary considerations weigh heavily for most young physicians. Given an average debt of some $56,000 for 1992 medical school graduates[2], it is no wonder that many young physicians who are also starting families and mortgage payments choose more lucrative specialties. And, for internal medicine residents in particular, the differences in financial return from different types of medical practices and the additional investment required for specialty training is likely to be an important factor in career decisions.

A recent study, conducted to determine whether internal medicine subspecialty training in the EM oriented subspecialty of rheumatology and the procedure-oriented medical subspecialty of gastroenterology were financially worthwhile, found that rheumatologists had a negative return on their investment.[3] Although physician incomes are generally very high when compared with the average individual's earnings, not all physicians have the same level of income. This study found

---

[1] "The Present and Future Adequacy of Rheumatology Manpower: A Study of Health Care Needs and Physician Supply," by Marder, Meenan, Felson, et. al., *Arthritis and Rheumatism*, Vol. 34, No. 10 (October 1991).

[2] American Association of Medical Colleges, Graduation Questionnaire, 1992.

[3] "Subspecialty Training: Is It Financially Worthwhile ?," by Prashker and Meenan, *Annals of Internal Medicine*, Vol., 115, No. 9 (November 1991).

that the average net income before taxes for general internists, gastroenterologists, and rheumatologists in 1988 were $115,825, $201,875, and $118,056, respectively. Even adjusting for the new Medicare fee schedule changes, large differences remain between the incomes of these specialties. When considered exclusively as a financial decision, fellowship training in an EM oriented medical subspecialty such as rheumatology is a poor investment rendering a negative return.

The prospect of extra years spent in training combined with an increasing debt burden make certain subspecialties of internal medicine, like rheumatology less attractive as career alternatives. Thus, the coming years present a challenge for internal medicine and the EM oriented subspecialty of rheumatology to develop ways to attract the best medical students.

Medicare payment policies can play an enormous role in influencing physicians to choose primary care and its EM oriented subspecialties. Medicare Graduate Medical Education (GME) payments and student loan repayment policies should all be structured to support and encourage physicians to enter primary care and the EM oriented subspecialties like rheumatology which are in undersupply. Investment tax credits may also supply a vehicle to encourage primary care. While the new Medicare fee schedule was intended to shift payments away from procedures to EM services, thus encouraging primary care, inadequacies in the fee schedule remain which hinder the growth of primary care and the EM based subspecialties. One of the most glaring, but previously little noticed facts, is that the new fee schedule is only partially resource-based.

Congress envisioned a new Medicare physician payment system that was based on resources used. Yet the law which passed in 1989, created a new physician payment system which is only 54 percent resource-based. As you know, the number of relative value units assigned to each service under the new system is the sum of the units assigned in three categories: the amount of work required of the physician, practice expenses, and malpractice expenses. While the work component is resource-based, accounting for 54 percent of the total relative value units, payments for malpractice and particularly practice expense or overhead continue to be based on historical charges, therefore perpetuating the inherent biases of the old system. This inequity results in many surgical procedures being systematically overvalued, while primary care and other EM services remain underpaid. For example, a rheumatologist, general internist or other primary care physician, would have to provide 75 new patient (Level III) office visits to equal the overhead (practice expense) assigned to one coronary artery bypass procedure. This is even more troubling when it is realized that the bulk of the surgeon's overhead for this procedure is already paid for by the hospital.

The Physician Payment Review Commission (PPRC) has endorsed the concept that the overhead (practice expense) component of the Medicare fee schedule should be based on resource-costs. as has Dr. Hsiao of Harvard, the author of the RBRVS (Resource-Based Relative Value Scale). To encourage more physicians to enter into primary care and its subspecialties and to correct these flaws in the fee schedule, **the American College of Rheumatology recommends that: the Senate Finance Committee enact legislation directing the Secretary of HHS, in consultation with the PPRC and physician organizations, to report to Congress by June 1993 on a method, timetable, and the legislative changes needed, to base practice costs on resources used, rather than on historical charges.**

In addition to (1) adopting a resource-based reimbursement system for the physician's cost of practice, other Medicare policy changes that the ACR recommends to encourage primary care and improve the equity and adequacy of the Medicare fee schedule include:

(2) accelerating the transition period to the full fee schedule;

(3) repealing the new physician limits to pay new physicians the same as other physicians for services involving equivalent work. Although current law exempts primary care services -- defined as office, nursing home, and home visits -- from the payment limitations, other services by primary care physicians, such as hospital visits and consultations are subject to the limits; and

(4) eliminating the higher conversion factor update for surgery. Under current law, surgical services will automatically receive a 2.6 percent fee schedule update, compared to only 0.3 percent for primary care and other non-surgical services under the default formula unless Congress acts. The higher surgical update is contrary to the policy of establishing payments on the basis of the RBRVS, since surgery would be paid more than is justified on the basis of resource costs, and nonsurgery would be paid less. This inequity would become a permanent feature underlying all future updates, and is contrary to the intent of payment reform to create incentives for primary care and other EM services. To prevent a crisis in access to primary care services, Congress must act now to block the higher surgery update, provide a single update and volume performance standard for all services, and amend the law to prevent a separate and higher default formula for surgery in the future.

Statement of the American Medical Association

The American Medical Association is pleased to offer this statement, for the July 29, 1992 hearing record, pertaining to the supply of primary care physicians in this country and graduate medical education funding. These are important issues that are intimately related to current and future access to and quality of health care in America.

PHYSICIANS' CHOICE OF MEDICAL SPECIALTIES—SHORTAGE OF PRIMARY CARE PHYSICIANS

The process by which physicians choose their specialties is extremely complex. It is influenced by a diverse set of factors, including physician age and gender, choice of medical school, availability of residency positions, locational preferences, life-style preferences, and personality characteristics. Economic factors, while they have not in the past been found to have had a very strong effect on physicians specialty choices, now may be becoming increasingly important, due to ever-rising levels of educational indebtedness, the more austere economic environment, and the growing uncertainty about the future of medicine.

Even though the total supply of physicians is currently growing faster than the U.S. population and is projected to continue to grow for the next quarter of a century, there is considerable concern about whether the future supply of physicians will be able to meet the country's need for primary care services. Many health policy analysts believe that the current supply of primary care physicians (i.e., family physicians, general internal medicine practitioners, and pediatricians), only slightly more than one-third of all actively practicing physicians, is too low. Many analysts maintain that primary care physicians should constitute 50 percent of practicing physicians. However, in spite of efforts to stimulate interest in primary care, the proportion of primary care physicians in the physician work force is decreasing, and the number of students entering primary care residency training programs has declined.

With residencies in primary care fields going unfilled, it is clear that the failure of U.S. medical school graduates to choose primary care residency programs is not based on the unavailability of these positions. The fact is that the percentage of graduating U.S. medical students planning careers in primary care has declined from 34 percent in 1984 to approximately 14 percent in 1992. This trend away from primary care is a source of growing concern.

It is well documented that primary care physicians have considerably lower incomes than other physicians. Some policy analysts have suggested that the relatively low incomes of primary care physicians are responsible for discouraging students from pursuing primary care training, and they have recommended increased payments for primary care services to counter this trend. To some extent, these recommendations have been addressed by the Medicare program's implementation of the resource-based relative value scale (RBRVS) for determining Medicare payments for physician services. The RBRVS increases Medicare payments for evaluation and management services and general care while decreasing payments for procedural services. With Medicare accounting for a significant amount of the typical physician's practice, this recent change should increase incomes for most primary care physicians. However, since implementation of RBRVS only commenced in January 1992, it still remains to be seen whether the RBRVS will encourage new physicians to choose primary care careers.

AMA POLICY ON ENCOURAGING PHYSICIANS TO SEEK CAREERS IN PRIMARY CARE

The AMA has abundant policy on the issue of attracting individuals to seek careers in primary care. Over a decade ago, the AMA Council on Medical Education first issued a report advocating an increase in the proportion of primary care physicians. In order to achieve this Objective, the Council called for the continuance of "voluntary efforts to develop and expand both undergraduate and graduate programs to educate primary care physicians in increasing numbers," as well as encouragement for "the establishment of appropriate administrative units for family practice." The Council further maintained that "federal support, without coercive terms, should be available to institutions needing financial support for the expansion of resources for both undergraduate and graduate programs designed to increase the number of primary care physicians."

A resolution adopted by the AMA's House of Delegates at its December 1991 meeting called for establishing "a national priority and appropriate funding for increased training of primary care physicians." This resolution proceeded to call upon the Association, together with representatives of primary care groups and the aca-

demic community, to develop recommendations for adequate reimbursement of primary care physicians, improved recruitment of medical school graduates, and training a sufficient number of primary care physicians to meet demand. Presently, the AMA is researching the factors that either promote or deter students and physicians from choosing and remaining in primary care disciplines. Once completed, the AMA hopes to use this information to support and implement our policy to enhance primary care as a career choice. In 1990, the AMA went on record encouraging the Bureau of Health Professions to establish a series of grants for innovative pilot programs that change the current approaches to medical education at the undergraduate/graduate level in the primary care area which can be evaluated for their effectiveness in increasing the number of students choosing primary care careers. The AMA also urged the Liaison Committee on Medical Education, the accrediting body for medical education programs in this country, to strongly encourage medical schools to develop programs in primary medical care.

GRADUATE MEDICAL EDUCATION FUNDING

Present AMA policy supports continued adequate financing of graduate medical education from current sources as a public and private sector responsibility and, at the same time, investigation of alternative mechanisms for funding. The AMA supports a system of financing graduate medical education that includes reimbursement from patient care revenues, including payments from Medicare and major insurance carriers, as well as specific subsidies. Further, the AMA believes that federal, state and local governments, as well as private foundations and industry, should participate in financing graduate medical education as part of their support for health professions education. The AMA also believes that Medicare should appropriately reimburse the costs of training residents in outpatient primary care programs. As legislation to restructure our health care system is considered, improving the financing for graduate medical education also must be considered as a vital element for the future well-being of our country.

CONCLUSION

It is crucial to the operation of the American health care system that we maintain an adequate supply of primary care physicians in this country. Failure to do so will result in adverse consequences in terms of access to and quality and cost of the provision of medical care rendered to patients. It is also critical to adopt policies and implement programs necessary to protect and enhance the excellence of graduate medical education provided to resident physicians in U.S. medical institutions. The AMA stands ready to work with this Committee and others to assist in this process.

STATEMENT OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION

The American Medical Directors Association (AMDA), a national professional organization of primary care physicians who provide direct care and oversight to residents of nursing facilities is deeply concerned about the barriers and disincentives facing these physicians. The intention of the Nursing Home Reform Act contained in the Omnibus Budget Reconciliation Act of 1987 was to improve the quality of care in nursing facilities. Increased physician responsibilities and new physician work are a critical component to achieving this goal; and one that is wholeheartedly supported by AMDA. Unfortunately, the new Medicare Physician Fee Schedule and RBRVS, fail to recognize the new requirements mandated by OBRA '87. In order for nursing home reform to be fully implemented, to stave off physician flight from this site of primary care, and to assure quality medical care within the nursing facility, several barriers must be addressed:

Financial Barriers

The studies commissioned by Hsaio to establish the resource based relative value scale found physician visits to nursing facility patients to be the most undervalued of all physician services. While the new Medicare Physician Fee Schedule was intended to increase reimbursement of primary care services, including nursing home visits, AMDA data gathered from physicians around the country show no significant improvement in reimbursement rates. In fact, in some areas, including rural jurisdictions, which were a target for increasing reimbursement to attract primary care physicians, reimbursement rates have been reduced. Nursing facilities will continue to have difficulty recruiting and retaining quality physicians unless adequate reimbursement for services delivered is available.

Regulatory Barriers

The nursing facility is the most highly regulated site in which physicians deliver primary care. Regulations specify the minimum frequency of physician visits, physician participation in the multi-disciplinary assessment process, drug therapy and restraint order guidelines that physicians must comply with, and oversight of physician practice through pharmacy review and the survey process. The new work required, combined with the low rate of reimbursement create a formula for physician frustration. While many dedicated physicians want to care for their patients in this setting, they simply cannot comply with the increased requirements, within the realities of running their practices.

Education/Attitudinal Barriers

Medical schools and residency programs typically have ignored the nursing facility as a site of training. Lack of exposure to successful models for nursing facility practice and a lack of knowledge regarding special requirements of the nursing facility resident, increase the practicing physician's frustration with nursing facility practice. These same factors could have the potential to decrease the quality of care rendered. Many of the attitudes held by physicians towards patient populations and medical specialties are formed during their training. Unless physicians are exposed to positive nursing facility role models during their training, they will most likely adapt the negative stereotypes and attitudes that abound about nursing facility practice, and will prefer not to be associated with the older populations and long term care institutions.

All these factors are important, but given changes in regulatory burden and education and attitudes, the truth is, the lack of equitable financial reimbursement for work that must be done by regulation, would still discourage physician involvement. Fair reimbursement is essential to the success of nursing home reform.

AMDA would be pleased to be a resource for further materials and discussion on any of these matters.

We thank you for the opportunity to submit this statement.

Statement of the American Medical Student Association

The American Medical Student Association (AMSA) represents more than 30,000 medical student members nationwide. Speaking for this membership, AMSA offers the following comments on Medicare policies and physicians' choice of specialties.

NEED FOR CHANGE

In virtually every health profession, students are demonstrating declining interest in generalist careers. Only 25.4% of graduating medical students today express an interest in primary care careers, while only a decade ago as many as 40% were interested (Jolly and Hudley, 1991).

If current trends continue, the future distribution of physician specialties seems even bleaker. Among allopathic medical students, for instance, the fill rate for family practice residency programs has fallen from 82% in 1987 to 66% in 1992 (National Resident Matching Program, 1992). Even osteopathic medical students, educated in a tradition of generalism and community service, are choosing specialty residencies in increasing proportions (Barnett and Midtling, 1989).

Influencing factors in the maldistribution of physician specialties are multifaceted, involving students, faculty, schools, hospitals, financiers and the community. The government contributes the bulk of funding for graduate medical education. Unfortunately, those funds are provided primarily to university tertiary care teaching hospitals. Such funding practices contribute to and perpetuate the emphasis of the medical community on procedure-oriented sub-specialists working out of hospitals. AMSA defines primary care to include medical care delivery which incorporates and emphasizes the four principles of first contact, ongoing responsibility, comprehensiveness of scope, and overall coordination of the patient's health problems, be they biological, behavioral, or social.

SOLUTIONS

Educators and policymakers are reaching consensus that multidimensional approaches are needed to build an expanded generalist workforce for underserved 2 communities: proactive admissions policies, increased training in inner cities and rural areas (Politzer et al., 1991) which is not discouraged by financial disincentives, and exposure to role models in community-oriented primary care (Weaver, 1990).

This exposure needs to begin early, before specialty choices are made, and remain consistent throughout training (Schwartz, 1992). Among health professions educators, there is a revival of interest in interdisciplinary team training (Fickenscher and Lagerwey-Voorman, 1992) as a uniquely effective means of teaching the team approach needed in community oriented primary care. Most important, efforts to recruit more generalist providers will require the collaboration of health professions schools, state and federal governments, private foundations, and the health professionals-in-training themselves (O'Neil, 1992).

A recent initiative of AMSA is Generalist Physicians In Training (GPIT) created to address and change the nationwide imbalance in physician specialty distribution. While GPIT proposes to address and challenge medical education within and outside the curriculum, success can only be achieved through activity at all levels of involvement as briefly mentioned below.

AMSA urges the creation and maintenance of family practice departments at each medical school equivalent in status and financial support to other major clinical departments of that school and supports the concept that 50 percent or more of all residency positions be in areas that meet the definition of primary care. AMSA also supports the concept of federal and state initiative grants directed at meeting national health manpower objectives and strongly urges the development of loan pro-

grams with loan forgiveness features tied to service in areas of geographic and specialty need.

With respect to physician reimbursement, AMSA supports the Resource Based Relative Value Scale as a valid instrument, useful for comparing work levels across medical and surgical specialties, and further encourages the implementation of this scale, in a budget neutral fashion, by third party payers, including federal and state governments, the private insurance industry, health maintenance organizations, and employers.

CONCLUSION

The American Medical Student Association believes that ensuring the availability of appropriate health care for all Americans requires a correction of the current maldistribution of physician specialties through coordinated reforms at the federal, state, local, hospital, medical school, medical student and community levels. An emphasis on primary care from your committee will undoubtedly aid efforts to provide appropriate and cost efficient care for communities. The American Medical Student Association would welcome the opportunity to discuss these issues further with you.

REFERENCES

Barnett, PG, Midtling, JE. Public policy and the supply of primary care physicians. *JAMA.* 1989;262:2864–2868.

Fickenscher, K, Lagerwey-Voorman, M. How can we recruit more primary practitioners in rural areas and inner cities? Presentation at the National Primary Care Conference. Washington, DC: Health Resources and Services Administration; 1992.

Jolly, P, Hudley, DM. *AAMC Data Book.* Washington, DC: Association of American Medical Colleges; 1991.

National Resident Matching Program, 1992.

O'Neil, E. Education for primary care. Presentation at the National Primary Care Conference. Washington, DC: Health Resources and Services Administration;1992.

Politzer, RM, Harris, DL, Gaston, MH, Mullan, F. Primary care physician supply and the medically underserved: a status report and recommendations [Caring for the Uninsured and Underinsured). *JAMA.* 1991;266:104–109.

Schwartz, MR. How can health professions training enhance the objectives of improved access to care? Presentation at the National Primary Care Conference. Washington, DC: Health Resources and Services Administration;1992.

Weaver, DL. The National Health Service Corps: a partner in rural medical education. *Academic Medicine.* 1990;65:S43–S44.

STATEMENT OF THE AMERICAN OSTEOPATHIC HOSPITAL ASSOCIATION

Mr. Chairman: The American Osteopathic Hospital Association (AOHA) is the national association representing 106 member osteopathic hospitals including 79 teaching hospitals.

AOHA commends you for holding this hearing on graduate medical education. We agree with your statement that we need to examine Medicare's role in establishing the ratio of generalists to specialists in the U.S. We also agree that it is important to look at options for modifying Medicare policies, including graduate medical education payments and the physician payment schedule to encourage physicians to opt for a career in primary care.

AOHA member teaching hospitals have long been committed to the training of primary care physicians. The record of our hospitals in successfully encouraging osteopathic physicians (DOs) to enter practice in primary care is unsurpassed.

More than half of the nearly 30,000 osteopathic physicians practicing nationwide are in primary care. In addition many of the physicians trained in our medical education programs dedicate their lives to service of patients in underserved areas.

Millions of Americans in West Virginia, Arkansas, South Dakota, Texas, Maine, Missouri, Kansas, Rhode Island, Michigan, Ohio and all 50 states benefit from the primary care offered by osteopathic physicians trained by AOHA-member hospitals.

Many sections of the nation would have no access to physician-health care if it were not for the physicians trained in osteopathic medical education programs. This delivery of quality services to rural and other underserved areas by osteopathic hospitals and physicians is vital to the economic survival of those sections of the nation. Without health care services in a town or county, industry generally will not be attracted or be able to sustain a work force there.

As Health and Human Services Secretary William Sullivan noted, although osteopathic physicians represent only five percent of all physicians in the U.S., in towns with populations of less than 10,000, DOs comprise 15 percent of the total number of physicians serving these communities. The figure climbs over 18 percent in counties with less than 2,500 population, according to a study of physician supply by David Kindig, Ph.D. of the University of Wisconsin.

The tremendous beneficial effect of the commitment of the osteopathic hospitals, colleges and physicians to primary care is illustrated by the recent experience in Weiser, Idaho. The small, rural town was in danger of losing all three of its physicians—and with it the ability to keep its hospital open. Weiser had tried for four years to lure a new physician without luck. Two longtime physicians were near retirement. Bryan Drake, the younger osteopathic physician in the town, said he couldn't provide all the health care services alone.

Relief for the town came when Deland Barr, a 41-year-old osteopathic physician responded to a request to practice there. At about the same time, a contact of Dr. Drake's from medical school was looking for a rural setting in the Northwest to practice. On the list of leads was Memorial Hospital in Weiser. When Dr. Timothy Hodges learned that Dr. Drake was in practice there, the two reestablished contact and they decided to go into practice together in Weiser.

Dr. Hodges arrived July 27—about the same time of arrival for Dr. Barr who inherits the other practice available in town. The hospital will now remain open. The people in and around Weiser will keep vital access to quality physician and hospital services thanks to these dedicated osteopathic physicians.

With the high percentages of osteopathic physicians serving rural areas, experiences similar to this inevitably occur again and again in our nation. We believe it is the combined commitment of osteopathic hospital medical education programs, osteopathic medical colleges and physicians which results in this contribution to quality primary care in underserved areas.

Let me give you an example from Ohio. A curriculum developed at the Ohio University College of Osteopathic Medicine places students with primary care providers for at least one half of their clinical training years—third and fourth year rotations. This is reinforced during the intern year, with additional primary care rotation and out-placements to rural hospitals and outpatient experiences. These hospitals are generally medium-size community hospitals averaging about 240 beds. There is much personalized, one-on-one student education by the medical staff which does not exist at larger academic medical centers. The profession is also developing excellent family practice residency programs in association with the hospitals.

The results speak for themselves—65 percent of the osteopathic graduates are in primary care where they are most needed. Seventy percent stayed in Ohio with twenty percent practicing in communities with less than 10,000 population. Another 14 percent practice in areas with population between 10,000 and 25,000.

Despite this commitment to primary care, particularly in underserved areas, osteopathic medical education programs are facing many of the same pressures as allopathic medical education programs. Fewer residents are choosing primary care than they did a generation ago. The pressures of mounting student loan debts, disparate income incentives and lack of special monetary incentives to choose primary care residencies has led to a trend of decreasing interest in primary care.

We encourage the committee to consider implementing incentives in graduate medical education reimbursement by Medicare for interns and residents to choose primary care training. The current system of GME reimbursement offers no extra incentive for a resident to choose primary care training. Therefore, we find an increasing number of empty primary care slots in medical education programs.

By providing funding for medical education programs to improve their primary care training programs and by offering financial incentive packages for primary care residents, more residents would choose primary care. Again, we agree with you that it is important to examine options for modifying Medicare policies, including graduate medical education payments and the physician payment schedule to encourage physicians to choose careers in primary care.

Our association represents hospitals with medical education programs that have had the most success in attracting and training primary care physicians. We believe that we can offer the committee the benefit of the experiences and expertise of our membership in addressing the need for more primary care physicians. We commend you for addressing this issue and offer our assistance to the committee as it considers implementing needed reforms.

Statement of the American Society of Internal Medicine

Introduction

The American Society of Internal Medicine (ASIM) appreciates the opportunity to present the views of America's specialists in adult medical care on the effect of Medicare payment policies on the choice of physician specialty.

We compliment the committee for holding a hearing on this important subject. As the representatives of the specialty that provides more Medicare patients with primary care than any other, ASIM has had a long record of supporting changes in Medicare policies to encourage primary care. We were the first physician organization to call for enactment of legislation to mandate that Medicare payments be based on a resource based relative value scale (RBRVS). Under the leadership of this subcommittee, Congress did enact legislation in 1989 to mandate the RBRVS fee schedule, beginning in 1992 with the new payment rates becoming fully effective in 1996. In doing so, Congress hoped and expected--as did we--that the new fee schedule would substantially improve payments for undervalued primary care and other evaluation and management (E/M), such as visits and consultations, and by doing so would alter the existing financial incentives to encourage primary care instead of high technology, procedurally-onented medicine.

ASIM continues to believe that the policy of basing Medicare payments on the RBRVS was the right one for the country, and will be of some help in reducing the gap in payments that disproportionately penalizes primary care physicians and rewards surgical and other procedural specialties. But it has also become clear that because of policies that are undermining the RBRVS, the new fee schedule by itself will not be sufficient to avert a crisis in access to primary care services. The gains in payments for primary care services that are likely to result from the fee schedule are simply too modest--and in some areas of the country nonexistent--to persuade young physicians to go into primary care over higher-paid surgical specialties, and for established physicians who are contemplating getting out of or limiting their primary care practices--by retiring early, taking nonpatient-care related administrative positions, or limiting the number of Medicare patients they can afford to see--to stay with their chosen field.

Before using the word "crisis" to describe what is happening to primary care, ASIM thought carefully if we could be fairly accused of exaggerating what is occurring for political reasons, of crying wolf, or of engaging in scare tactics. But we chose the word carefully and deliberately, because it best describes the severity of the problem facing this country. ASIM believes that unless policymakers act now to avert the problem, there will be too few primary care physicians to meet the needs of America's graying population.

We are particularly concerned that there will be too few general internists, the physicians that by training, experience and systematic style of practice are often best suited to provide primary care to the older, sicker, and frailer patients who, in the next two decades, will constitute an ever-growing proportion of the population. Internists are also trained to manage the entire continuum of care for their patients--from preventive counselling, to diagnosis of complex problems, to arranging for consultations by other physicians, to taking care of patients following surgery, to supervising the care provided by home health agency and nursing home staff--skills that will particularly be required in the future. Largely because of their skill at systematically evaluating and managing their patients' health care, internists also practice cost-effective medicine. The Physician Payment Review Commission (PPRC) recently reported that in 1989-1990, general internists had the lowest rate of growth in volume (3.8 percent) than any other specialty with the exception of general surgery, which had a virtually identical rate of growth. Every other specialty, including every surgical subspecialty, had higher volume growth.

Why has ASIM concluded that there will be a crisis in access to primary care? Because the trends in choice of specialty indicate that fewer physicians are choosing primary care, because more and more established primary care physicians are telling us that they are dissatisfied and considering a change in career, because more primary care physicians--especially those trained exclusively in adult medical care--are needed as the population ages, and because it takes almost ten years to educate and prepare a primary care physician for practice.

There is solid data supporting the conclusion that there will be a severe shortage of primary care physicians, particularly in traditionally underserved rural and inner city locales. According to the Federated Council of Internal Medicine, of which ASIM is a member, over the past several years, the entry into internal medicine residency positions by U.S. medical school graduates has declined progressively, the unmatched positions have increased, and the number of internists who go into primary care is lessened by the large proportion--more than 60 percent--who now go on to subspecialty training. Further, the United States has a lower proportion of primary care physicians than any other developed country. Only about one-third of this country's physicians practice in primary care, compared to one half in Canada and two-thirds in Great Britain. Finally, more and more primary care physicians are dissatisfied or cannot afford to stay in practice, and are choosing other careers as a result. Many are advising younger people not to go into primary care.

A recent letter from an ASIM member illustrates the depth of the problem for many primary care physicians. He wrote the following:

"I felt it was important to advise you of my decision to leave the primary care specialty of internal medicine practice in Milwaukee, Wisconsin. I have been in practice 17 years. The latest information from HCFA is that I will receive a 10 percent increase in my reimbursements from Medicare patients over the next five years. This matches an overhead increase of about 4 percent per year equalling 20 percent during that time for a net loss of 10 percent. Since I am getting reimbursed 15 percent above overhead right now, I will be working for nothing in five years for my Medicare patients. They already number more than 50 percent of my practice. One month last year they accounted for 70 percent of my practice activity. I cannot work for nothing that much of the time. For that reason I have accepted a position with an insurance firm here in Milwaukee that will pay me a salary greater than what I can make working 65-85 hours a week as an internist. My office hours will be less than 40 hours per week with weekends and nights off. There will be paid vacations . . . under the circumstances, it makes no sense at all to stay in the practice of medicine. I have written to my congressman about my decision. I hope to use my position in this insurance company as a podium to exert political pressure on the establishment to improve the payments to primary care physicians. If you have additional suggestions for me in attacking this problem and assisting the Medicare population in maintaining proper delivery of medical care, please let me know."

He is not alone. ASIM has received dozens of other reports from members who have taken, or are contemplating, similar actions. Recent stories in The New York Times and Los Angeles Times tell similar accounts of primary care physicians quitting practice because of low payments and the hassles of dealing with an unresponsive health care bureaucracy.

Even though few patients today may be complaining that they can't find a primary care physician who will take care of them, this doesn't change the fact that as the need for primary care physicians increases, and the supply decreases, in the next five-to-ten years it is likely that there will be too few primary care physicians to meet the need. At that time, we will have a new access crisis, but one that cannot be readily solved by the enactment of legislation. By the time the country recognizes it has a crisis in access to primary care, and acts to create sufficient incentives for primary care, it will take another ten years to train enough primary care physicians to resolve the crisis.

It is ASIM's fervent hope that by focusing on the issue now, the crisis can still be averted. But to do the job, it will take an activist agenda to increase the public investment in primary care. Small and inadequate answers will result in small and inadequate results. And when the country recognizes how big the problem is, the cost of solving it will be much higher. But by making a substantial investment in primary care today, the crisis can be averted, the cost will be lower, and the payoff will be higher. The remainder of our statement provides ASIM's preliminary recommendations for an agenda to increase the public investment in general internal medicine and other primary care specialties.

Improving Medicare Payments for Primary Care

When Congress mandated implementation of the RBRVS fee schedule, to be phased in over five years beginning in January, 1992, it intended to substantially improve payments for undervalued primary care services. Projections at the time the legislation was enacted were that primary care and other evaluation and management services would have gained 30 percent or more on average compared to Medicare's historical payments for those services. Even with those increases, the new fee schedule would have still systematically undervalued primary car and other E/M services, and overvalued most surgical procedures, since the practice cost compor ent of the fee schedule continued to be based on historical charges, not resource costs. As a result, even th ugh physician work is based on resource costs, the overhead component of the payment schedule remains based on historical charges that were inherently biased towards surgical procedures.

Further, in the years since the legislation was enacted, the projected improvements have been greatly diminished. The Omnibus Budget Reconciliation Act of 1990 made substantial cuts in Medicare expenditures on physician services, which resulted in the conversion factor for the new fee schedule--and payments for primary care--being considerably lower than originally intended. The subsequent decision by the administration to assume a "behavioral offset" or "volume baseline adjustment" further lowered the conversion factor. The administration also decided to make an across-the-board 5.5% percent cut in the historical payment bases for all services to offset an "asymmetry" problem in the transition to the new payment levels that, it believed, otherwise would have violated budget neutrality. Although this adjustment did not result in a permanent reduction in the conversion factor, or payments for primary care, it did have the effect of lowering payments in 1992-1995 for the estimated 65% of primary care services still in transition to the full fee schedule.

Additional policies that are now under consideration may further reduce the intended gains for primary care and other evaluation and management services. The administration's process of "refining" the initial relative value units may result in decisions to accept significant increases in relative values for many surgical procedures, at the expense of primary care. This could occur because under the requirements of OBRA 89, any changes in relative values must not increase or decrease expenditures by more than $20 million in any fiscal year. Therefore, the administration has indicated that any increases in relative values must be offset by rescaling (lowering) all other RVUs. Most of the comments that the administration received recommended increases in surgical and procedural RVUs. If a significant number of surgical RVUs are increased in response to those comments, the result is likely to be a further reduction in the relative values for primary care. In response, ASIM has urged the administration to establish a "firewall" that protects undervalued primary care services from any rescaling due to changes in surgical RVUs.

Under pay-as-you-go budget constraints, needed legislation now pending in Congress may further reduce the gains for primary care. ASIM strongly supports S. 2914, introduced by Senators Durenburger, Rockefeller, and Packwood. The bill would fully restore Medicare payments for EKG interpretation, which were prohibited under a hastily-enacted provision of OBRA 90. We also support repeal of the payment limits on new physicians. Even though repeal of the new physician limits will have a disproportionately greater benefit for physicians other than those in primary care--since some primary care services (i.e. office, nursing home, and home visits) are already exempt from the limits--it will help new primary care physicians by removing the limits on their other services. And as a matter of principle, ASIM supports both the EKG and new physician legislation, because under an RBRVS fee schedule all physician services that require an expenditure of work and overhead should be reimbursed, and all physicians should be paid the same for services involving equal work, regardless of how long they have been in practice. But it must also be understood that these two needed changes--restoring EKG interpretation payments and repeal of the new physician limits--will have the unfortunate consequence of reducing payments under the fee schedule for primary care and other E/M services by an estimated 3.9 percent.

Finally, the recommendation for a higher and unwarranted surgical update in 1993, which will automatically go into effect unless Congress decides otherwise, will permanently lower payments for primary care and other E/M services. It will mean that primary care will always be paid less than the resource costs of providing those services, and surgery will be paid more.

For all of these reasons, payments for primary care under the new RBRVS fee schedule are likely to be considerably lower than Congress intended when it enacted payment reform in 1989, and considerably less than is required to shift the incentives from high technology specialties to primary care. The RBRVS itself will help, by shifting a greater share of the dollars to primary care. But the policies that have already undermined, and may further compromise, the actual payment gains for primary care will mean that the fee schedule itself will fall far short of what is required.

Consequently, ASIM believes that it is essential that Congress take action now to substantially increase the Medicare program's investment in primary care. This will require enacting legislation and exercising oversight to make sure that the RBRVS is not further undermined, and developing other payment-related policies to reduce the gap in compensation between surgery and other procedure-oriented specialties and primary care. Other policies, such as changes in funding for graduate medical education (GME) to encourage primary care training programs, are also needed. ASIM's recommendations on changes in GME funding are discussed later in this statement. But ASIM believes strongly that although increasing support for primary care training programs is necessary and appropriate, it will not by itself avert the crisis in primary care unless changes are also made to substantially improve Medicare payments for primary care services.

As a starting point for a legislative agenda to increase the public investment in primary care, ASIM recommends consideration of the following policies:

1. Congress should block the higher surgical fee schedule update for 1993 that otherwise will go into effect by default, mandate a single volume performance standard for FY 1993, and amend the law to require that for all future VPSs and updates, a single VPS and update will automatically go into effect under a default scenario.

Of the actions that Congress can take this year to avert a crisis in primary care, there is no more urgent matter than blocking the unwarranted increase for surgery, at the expense of primary care and changing the law so that this cannot occur again. If the recommendation for a 2.6% update for surgery, and only .3% for primary care and other nonsurgical services is allowed to go into effect, *the update for a $20 office visit will be only six cents*. The unwarranted higher update for surgery will:

- Distort the RBRVS, since it will permanently increase the fee schedule conversion factor for surgery, with the result that surgery will always be paid more--and primary care and other nonsurgery less--than is merited based on resource costs.

- Reduce the gains for primary care expected from the fee schedule, which have already been seriously undermined due to other policies. It will send a powerful signal to primary care physicians--and especially young physicians considering primary care--that Medicare is going back on its commitment to improve the economic environment for primary care.

- Exacerbate the trend of fewer physicians entering primary care, and established primary care physicians leaving primary care practice. It will particularly have an adverse effect on access to primary care services in rural areas.

The higher surgery update would be more defensible if it was true that surgeons have done a better job of controlling volume than nonsurgeons. But the facts are otherwise. The Physician Payment Review Commission's (PPRC's) report on Fee Update and Medicare Volume Performance Standards for 1993 shows conclusively that surgical volume increases were actually higher than nonsurgery, and considerably higher than increases in primary care volume. Specifically, here are some of the incorrect assumptions often made in defense of the higher surgery update--and the facts as presented in the PPRC's report to Congress:

It is often assumed that the growth in the volume of surgical procedures was lower than for nonsurgery. In fact, the PPRC's analysis of "data provided by the Medicare actuary shows that volume increases (for surgery and nonsurgery) were virtually identical" from 1986-1989. In 1990, "surgery grew slightly faster than nonsurgery." The lowest growth in volume was in visits and consultations, which grew by only 5.94% per year from 1986-1989, and 5.55% in 1989-90, compared to surgical volume growth of 8.26% per year in 1986-89 and 7.62% in 1989-90.

What is the real reason that surgical outlays were less than the surgical VPS? According to the PPRC, "the differences in expenditures (between surgery and nonsurgery) are due almost entirely to changes in Medicare payment rates–a reduction for surgical services and an increase for nonsurgical services. As a result of assumptions about behavioral offsets, the 1991 VPS provided for a higher volume increase for surgical services than for nonsurgical services. When volume increased at the same rate, the performance of surgical procedures was judged superior to that of nonsurgical services and a higher update is thus prescribed by the default formula." The administration assumed that surgeons would offset fee reductions mainly by doing more surgery, while it did not consider an alternate "possibility that a substantial portion of surgeons' responses to cuts in fees for surgical services would occur in the nonsurgical category (which) has empirical support." In other words, the administration set the original surgical VPS too high, based on faulty assumptions of a behavioral offset. And surgeons may have offset fee reductions by increasing volume in services that fall within the nonsurgery VPS. The PPRC is doing further analysis of how the VPSs may have been "distorted by imprecise assumptions concerning physician behavior."

It is also claimed by some that volume growth by specialty was lower for surgeons than primary care physicians, and that therefore surgeons merit a greater reward. The fact is that general internal medicine, the specialty that provides primary care to more Medicare patients than any other, had a lower rate of growth in volume from 1989-90 (3.8%) than any other specialty except one, and specifically had lower volume than the following surgical subspecialties that fall within the surgery VPS: ophthalmologists (8.8%), orthopedic surgeons (9.2%), otorhinolaryngologists (9.9%), thoracic surgeons (5.4%), urologists (11.9%), and dermatologists (10.8%). The only specialty with lower volume growth was general surgery (3.7%). Overall, primary care specialties had slightly lower volume growth than surgical specialists.

The PPRC's analysis clearly supports ASIM's view that the proposed higher update for surgery is in conflict with the objective of rewarding physicians for efficiency. It will result in lower updates for services by internists, even though they had the second lowest volume growth of any specialty, while providing higher updates for at least six surgical subspecialties with higher volume growth. It will result in lower payments for those services with the lowest rate of volume growth–visits and consultations–and higher payments for surgical procedures with higher volume growth. It improperly rewards surgeons for taking action to meet the VPS, when the real reasons are that Congress mandated cuts in surgical fees, the administration erred in its assumptions of a behavioral offset in response to those fee reductions, and the possibility (supported by empirical evidence) that surgeons may have increased volume of services that they provide that fall within the nonsurgery category.

ASIM agrees with the PPRC's conclusion that Congress should return to a single standard covering all services because of practical difficulties in calculating the VPSs and because it "is at odds with one of the major goals of payment reform: encouraging more effective medical practice. . . For example, substitution of primary care for procedures was envisioned as a major goal of payment reform, but making that substitution under the current VPS defaults would lead to decreased payment for primary care. Moreover . . . differential updates could, over time, introduce serious distortions into the resource-based fee schedule." We strongly urge the committee to take immediate action to require a single VPS and update, beginning in 1993, and in all future years.

2. As long as separate MVPSs and updates are mandated by the default formula established by law, several changes should be made to alleviate the adverse impact of separate updates on primary care:

A. **Specify that the higher surgery update for 1993 should affect payment rates for 1993 only and not be incorporated into the baseline for future years, as recommended by the PPRC.**

B. Change **the default formula so that there is a separate and higher update floor for primary care. Currently, the floor (minimum update) for all services is the Medicare economic index (MEI) minus 2.0 percent in 1993, 2.5% in 1994 and 1995, and 3 percent thereafter.** For primary care only, this could be changed so that the minimum update would be the MEI minus one percent. If necessary, the floor for other services could be lowered to maintain budget neutrality.

C. **Or change the default update formula so that the update for primary care services is the Medicare economic index, plus or minus the amount that expenditures compared to the applicable VPS, *plus an annual bonus payment of several percentages* (e.g. two percent or more).** By providing for the increase as a bonus payment, it would not permanently distort the RBRVS conversion factor.

If Congress decides to maintain separate VPSs and updates as a permanent feature of the fee schedule, then ASIM believes that consideration must be given to establishing a separate and higher VPS for primary care and other E/M services. It is our strong preference, however, that Congress return to a single VPS and update, since separate VPSs and updates by definition will result in distortions in the RBRVS, cause shifting of costs from one category to another, and create the kinds of practical problems cited by the PPRC. But if Congress does not act to require a single VPS and update policy, then it will be necessary to consider additional policies that will protect primary care services from being cut. A separate VPS for primary care could theoretically help protect primary care from reductions, but only if the standard is calculated in such a way as to allow for a greater increase in expenditures for primary care than would be expected based on historical trends. Otherwise, a separate primary care VPS could result in lower updates for primary care. This would occur if the VPS is set so low that the goal of increasing the investment in primary care, causing a greater increase in expenditures on primary care, causes the primary care VPS to be exceeded. Congress would need to specify that a separate primary care VPS should be calculated in such a way as to allow the intended increases in payments for and access to primary care to occur, rather than to restrain the rate of growth below what is projected based on historical trends as is required under the current VPS formula.

3. The practice cost component of the RBRVS should be changed so that it is based on resource costs, which the PPRC predicts would substantially benefit payments for primary care. Although both HCFA and the PPRC have been studying this issue, it is time for the administration to develop a formal recommendation to Congress to change the inequitable charge-based methodology. The methodology being studied by the PPRC would increase payments for primary care and other E/M services by an estimated 13 percent. It makes no sense for Congress to maintain a methodology that rewards historically-overpaid surgical procedures provided in the hospital setting, where the hospital bears most of the overhead costs, at the expense of office based primary care services where the overhead is borne completely by the primary care physician. To illustrate, under the current fee schedule, an internist would have to provide 75 mid-level office visits, during which time he or she is bearing the entire expense of running the office and paying office staff, to equal the overhead payment Medicare allows for a single coronary bypass procedure done in the hospital. Congress should mandate that the administration study and make a report to Congress, with recommendations on basing the practice component of the fee schedule on practice costs, no later than June, 1993.

4. The 10 percent reimbursement bonus for primary care services provided in rural and other designated manpower shortage areas should be expanded to include all E/M services, and/or the criteria for locales that would be eligible for the bonus should be changed to allow for more locales to be included. Currently, primary care services--defined narrowly as office, nursing home, and home visits--are paid a 10 percent bonus in designated shortage areas. Many E/M services by primary care physicians, such as hospital visits, are not eligible for the bonus. In addition, there are many locales that do not fit the criteria for a shortage area, but that in fact have inadequate access to primary care.

5. The exemption from the new physician payment limits for primary care should be expanded to include all E/M services (if the provision is not repealed outright). Since it is imperative to attract young physicians to primary care, exempting all E/M services from the limits would be of significant benefit to debt-laden young physicians who choose primary care. ASIM prefers repeal of the limits in their entirety, but an expanded exemption for primary care would be a significant improvement over current law.

6. A one-time "bonus" payment for primary care services (or all E/M services) could be enacted by Congress. This bonus would be in addition to, and independent of, any payment increases from transition to the RBRVS payment schedule, or from the regular annual updates. The one time bonus--e.g. a 5 percent payment bonus--would be separate from the regular conversion factor update, so it would not result in a permanent change in the fee schedule conversion factors. The bonus would send a powerful signal to primary care physicians, however, that the federal government is serious about revitalizing primary care.

7. Accelerate the transition to the fee schedule. Given widespread disappointment with the Medicare fee schedule, a transition that allowed for larger increases in E/M services, over a shorter period of time, would help restore primary care physicians' confidence in reform. It would also provide real economic benefits to those who are trying to survive financially and can't wait until 1996. It would soften the impact of the tighter balance billing limits, since the 115 percent limit is effective in 1993, three years before the gains from the RBRVS are fully realized. For many primary care physicians, the tighter limits will wipe out any gains in payments for the fee schedule in 1993, 1994, and 1995, even if they will eventually be better off at full implementation. Finally, a faster transition would help protect the gains for E/M services from being undermined due to inadequate updates or inappropriate refinements in relative values. All of these advantages outweigh whatever concerns some may have about more rapid transition to the fee schedule.

8. Exercise oversight over the administration's refinements of relative values, and consider amending the law to establish a "firewall" that would protect the relative values for primary care and other E/M services from any reductions that would take place due to "rescaling" of relative values to maintain budget neutrality. ASIM believes that any further reduction in payments for office visits and other E/M services as a result of the refinement process is unacceptable, and contrary to the intent of the fee schedule. We believe that HCFA has been presented with considerable evidence that many E/M services, such as higher-level office visits and nursing home visits, are still undervalued under the current RBRVS. We also believe that most procedural services remain systematically overvalued, particularly if flaws in the practice cost component are taken into account.

ASIM is specifically concerned that in an effort to be responsive to physicians who are questioning the values established by the original Harvard RBRVS, the administration in most cases will end up agreeing to increases, even if the increases are less than the commenters requested. We are concerned that the administration may agree to replace the values obtained from four years of rigorous research by Harvard with work ratings obtained from a small panels of medical directors and physicians, particularly when the ratings of work that are obtained at this point in the process are inherently biased by financial considerations. Finally, we question whether or not the administration has critically evaluated procedural codes to determine if some of the initial RVUs were overvalued, or did it only evaluate ones where commenters asked for changes (which in almost all cases would be requests for increases). Our own observations have led us to believe that there is an effort underway to fragment, unbundle and redefine certain surgical codes to increase reimbursement, which merits investigation by the administration.

ASIM has recommended to the administration that any rescaling of the RVUs for procedural services should be budget neutral within that family of services. In other words, if the administration agrees to increases in RVUs for some procedures, they should be offset by reductions in other procedures. While we recognize that there will be objections to this, we think this is the only way to assure that the overall intent of the RBRVS--to reduce the disparity between evaluation and management (or cognitive services)--is not undermined. It allows for correction of particular anomalies or errors within families of services, without disturbing the overall relationship between E/M services and procedures that was established by the RBRVS. If this is not done for this year's refinement, it should certainly be required for future refinements.

The bottom line is that primary care cannot afford further reductions in payments and relative values for E/M services. If the administration cannot be persuaded to take action itself to protect primary care from being reduced during the refinement process, ASIM believes that Congress should express concern to the administration, and if necessary, mandate changes in the ground rules for such refinements to require that increases in procedural RVUs be offset by rescaling in the same family of services, rather than out of the relative values for primary care.

Recommendations on Graduate Medical Education Funding

The foregoing discussion has focused on changes that we believe are necessary in the current payment system to enhance the position of primary care. Now, ASIM would like to turn to those steps we believe are needed to ensure the proper emphasis on primary care in the health care system of tomorrow. We have already touched on the declining interest among medical students in primary care training and the difference in specialty mix between the United States and other nations with higher concentrations of primary care physicians. There are two measures now before Congress that begin to address the crucial investment in primary care training needed to assure sufficient primary care physicians in the years ahead.

Contained in HR 5502 are several provisions which would weight Medicare payments for graduate medical education more heavily in favor of primary care residents in family practice, general practice, general internal medicine and general pediatrics. The Secretary of HHS would be directed to establish criteria for designating residency programs as primary care programs.

HR 5748 would take a more cautious approach by requiring the Secretary of Health and Human Services to conduct a study of Medicare GME reimbursement and assess the impact of the proposed changes on GME payments before any such changes were implemented. This bill would also require that the study look at the impact of the proposed changes on the number of physicians who would receive residency training in primary care programs. Furthermore, the measure would ask the Secretary for additional recommendations as to further modifications that might be made in the GME payment methodology to increase the number of physicians receiving residency training in primary care programs.

ASIM believes that changing the payment formulae for GME to promote primary care is a positive concept and worthy of support. Such a step would undoubtedly increase the number of primary care residency training slots around the nation. However, such changes must be accompanied by additional actions as outlined elsewhere in this statement to provide incentives for physicians to go into and to stay in primary care once they enter private practice. Otherwise, this nation will just face more unfilled primary care training slots and continued shortages of primary care physicians.

Incentives which will have the greatest impact on residents to choose primary care will be those which enhance directly their reimbursement while still residents and those which will better their financial circumstances and quality of life once they enter private practice. Residents are typically paid at very low wages. They are carrying thousands of dollars of debt on their student loans during their residencies. Then if they enter a primary care private practice, they face this continued financial burden while earning salaries lower than many of their colleagues while facing increased administrative and overhead costs. Increased salaries for primary care residents is one logical approach to making primary care more attractive. Low interest loans, loan forgiveness, tax benefits and other individual financial incentives would also make primary care appealing to young physicians.

ASIM is concerned about the potential effect these proposed changes could have on internal medicine residencies because of the unique nature of internal medicine training. Most internal medicine residents in their initial years of basic internal medicine training do not know whether they will go on to subspecialty fellowships. Thus, it could be difficult to ascertain, for the purpose of weighting GME payments during those first years of training, which are the primary care internal medicine resident slots and which are the non-primary care internal medicine resident slots. ASIM would strenuously object if these circumstances were used to argue against counting at the highest weight all basic internal medicine residency slots. Rather, we believe all internal medicine resident slots during their initial years of training should be treated as primary care for the purpose of GME payments.

Any agenda to promote training of physicians in primary care and to encourage those physicians so trained to enter practice in primary care should include the following policies:

1. Measures which promote primary care by weighting GME payments in its favor as long as those increases are passed on in the form of increased stipends to residents in primary care training tracks. The urgent need to attract medical students to primary care means that action must be taken now through federal support of primary care training programs. However, medical students must see a connection between increased federal attention to primary care training and their actual reimbursement.

2. Pursuit of a study similar to that outlined by the Energy and Commerce Committee concurrent with the implementation of changes in GME payments. ASIM believes it would be useful for a study to examine the impact on primary care training of the changes in GME payments but, given the length of time required to train physicians, does not believe implementation of the changes should be delayed until such a study is complete. Particular attention should be given in any such study to the effect of GME changes on internal medicine residencies since internal medicine is the specialty which cares for more Medicare patients than any other. Finally, a mechanism should be considered for evaluating the GME formulae periodically so that changes are not dependent on Congressional attention.

3. Incentives that will enhance the attraction of primary care to physicians entering private practice such as low interest loans, loan forgiveness, tax benefits and other individual financial advantages. As noted previously, primary care physicians with a heavy debt burden and less earning capacity than their colleagues in other specialty disciplines must be given additional encouragement to pursue this field of practice.

4. Additional non-monetary incentives to enter primary care, such as those which would alleviate the administrative burdens imposed on primary care physicians. Primary care physicians whose workload is composed largely of patient visits and minor procedures come into contact with third party review and claims processing rules more often than do their surgical colleagues. Multiple, and often inconsistent, rules and regulations imposed by third parties on primary care physicians are frequently cited among the reasons for their disillusionment with primary care.

Conclusion

ASIM commends the Subcommittee on Medicare and Long Term Care, under the leadership of chairman Jay Rockefeller (D-WV) and ranking minority member Dave Durenberger (R-MN) for its continued commitment to developing policies to promote primary care. Your support for enactment of the RBRVS fee schedule represented an important step forward in revitalizing primary care, despite the fact due to other policies, the improvements for primary care will be less than expected and needed. Primary care physicians can be encouraged, however, by the committee's willingness to conduct this hearing on revising Medicare payment policies to revitalize primary care.

We do believe that a crisis in access to primary care can be averted, but only if Congress, the administration, and the medical profession adopt immediate and strong measures now to increase the public investment in primary care. The proposals presented in this statement should be considered as part of a legislative agenda to revitalize primary care. Others should be encouraged to develop additional proposals to accomplish this objective. ASIM plans to develop additional proposals to encourage physicians to practice in general internal medicine, and to assist those who are already in practice in maintaining their commitment to primary care.

Improving the public investment in primary care won't come cheap. But the price of waiting until the crisis is upon us will be much higher, and the payoff much lower, than acting now to avert the crisis from occurring. We look forward to working with the subcommittee on responsible policies to revitalize primary care.

The Society of Teachers of Family Medicine

8880 Ward Parkway
PO Box 8729
Kansas City, Missouri 64114
816-333-9700
800-274-2237
Fax 816-333-3884

1992-1993 BOARD OF DIRECTORS

President
Robert C Davidson MD MPH
Sacramento California

President-Elect
Richard L Holloway PhD
Milwaukee Wisconsin

Secretary-Treasurer
Anne D Walling MD
Wichita Kansas

Immediate Past President
Manore A Bowman MD MPA
Winston-Salem North Carolina

Executive Director
Roger A Sherwood CAE
Kansas City Missouri

Representatives to CAS
Donald L Fink MD
San Francisco California

Vincent R Hunt MD
Pawtucket Rhode Island

Members-at-Large
Peter G Coggan, MD, MSEd
Reno Nevada

Joseph Hobbs MD
Augusta Georgia

Elizabeth A Garrett MD MSPH
Columbia Missouri

Committee Chairs
Elizabeth A Burns MD
Chicago Illinois

Patricia M Cole MD
Minneapolis Minnesota

James E Davis MD MS
Madison Wisconsin

Katherine C Krause MD
Farmington Connecticut

Lars C Larsen MD
Fayetteville North Carolina

John E Midtling MD MS
Milwaukee Wisconsin

Resident Representative
Jenny Green Lee MD
New York New York

Student Representative
Laurel Walter
Columbia Missouri

Washington Office
2021 Massachusetts Avenue NW
Washington, DC 20036
202-986-3309
Fax 202-232-9044

August 12, 1992

The Honorable Jay Rockefeller
Chairman, Senate Finance
Subcommittee on Medicare and Long-Term Care
U.S. Senate
Washington, DC 20510

Dear Senator Rockefeller:

We are writing on behalf of the academic family medicine organizations listed below, to submit a statement for the record of the hearing on July 29 concerning physicians choice of specialties.

The testimony of the American Academy of Family Physicians describes at length the systemic problems associated with producing greater numbers of family physicians. We agree with their assessment of the situation and believe that reforms need to be made to respond to the federal policies that create inadvertent disincentives to the production of generalist physicians. We recommend the following changes to graduate medical education payment policies to help produce more family physicians to care for this nation's sick.

We support a restructuring of the Health Care Financing Administration's medicare graduate medical education funding to preferentially fund family practice and other generalist physician residencies. This effort is critical, and should not be sabotaged by rerouting these funds through medical schools, as some have suggested. Family practice in particular has a history of community-based training programs without close ties to individual medical schools. The ideal mechanism for distribution of GME funding is to directly fund residencies with a minimum of intermediaries.

GME payments should be limited to the first three years of residency. This would create more of an incentive for training programs producing generalist physicians and is in keeping with a national goal, as espoused by the Council on Graduate Medical Education (COGME) of producing fifty percent of our nation's practicing physicians as generalists.

Moreover, preferential weight in the formula should be given to family medicine, general internal medicine, and general pediatrics. These would be defined narrowly, to be those physicians participating in a family practice residency or in an approved residency program in internal medicine or pediatrics that specifically trains residents for the practice of general internal medicine or general pediatrics and meets the criteria established by the Secretary for grant eligibility under Section 784 of the Public Health Service Act.

In developing the GME payment formula ambulatory training sites should be included in the calculations and there should be a Part B component that pays for education and training in the ambulatory arena.

Believing that Medicare s ould pay its fair share of medical education costs, these and other interventions in the aggregate should result in 50 percent of training dollars going to support training of generalist physicians (as defined above) with half of that money going to fund family practice training.

If Congress were to make the changes we have outlined above, we believe it will have made a good start toward realigning the current perverse incentives that have become part of federal health policy.

We appreciate the opportunity to have our letter made part of the official hearing record.

Sincerely,

Robert Davidson, MD, MPH
President
Society of Teachers of
Family Medicine

F. Marian Bishop, Ph.D., MSPH
Legislative Chairman for
Association of Departments of
Family Medicine

Mary Willard, MD
President
Association of Family
Practice Residency Directors

Walter Rosser, MD
President
North American Primary Care
Research Group

○

CMS LIBRARY
3 8095 00017253 2

ISBN 0-16-040294-8
90000
9 780160 402944